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IN

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VOLUME 8

WITH 28 PLATES AND 8 TEXT FIGURES

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AND
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UNIVERSITY OF CALIFORNIA PUBLICATIONS
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A MISSION RECORD OF THE CALIFORNIA INDIANS

From a Manuscript in the Bancroft Library.

BY

A. L. KROEBER.

In 1811 the Spanish viceregal government of Mexico sent to Alta California a list of questions regarding the Indians at the missions, their customs and disposition in their native state, and their condition under missionary influence. This "interrogatorio" was answered at the various missions, the replies collected, and prefaced by the president of the missions with a short general statement or abstract of the answers received to each question. The compilation was presumably forwarded to Mexico, and a copy retained in the Archives of the mission Santa Barbara. There a copy was made in 1877 by E. F. Murray for Mr. H. H. Bancroft. On the acquisition of the Bancroft Library by the University of California, this copy became available for study. Through the courtesy of Professor Henry Morse Stephens, and the Commission on the Bancroft Library, the writer is enabled to present the following translation of extracts from this document.[1]

[1] The copy at the University of California is in the Archives of the Mission Santa Barbara, Miscellaneous Papers, volume VII, beginning at page 112, as this series of documents is at present bound and paged, and is entitled: *Contestacion al Interrogatorio del año de 1811 por el Presidente de las Misiones de esta Alta California, y los Padres de la Misiones de San Miguel, San Antonio, Soledad,* etc. The heading of the document itself is: *Interrogatorio dirigido al Il^mo S^or Obispo de Sonora, a 6 de Octubre del año 1811, por el Ex^mo S^or D^n Ciriaco Gonzales Carvajal, S^rio interº de la gobernacion del Reyno de Ultramar, y circulado por mi, de or^n del S^or B^n D^n José Joaquin Calvo, Gobernador de la expresada sagrada Mitra, y de los padres ministros de las misiones de San Miguel,* etc.

In the original, the various statements are not arranged primarily according to missions, but under the questions of the interrogatorio to which they are replies. A geographical order is however more convenient for ethnological uses and is here followed. The replies vary much in length, spirit, and value. Some of the missionaries evidently regarded compliance with the instructions of the questionnaire as an official requirement which was perfunctorily performed. In many cases no answers were given various questions at certain of the missions. Other fathers wrote more fully, but were more interested in the condition of the converted Indians than in their wild brethren or the customs of their fathers. Some, in answering those questions of the list that an ethnologist would be specially interested in, display lack of knowledge, for the replies are brief or vague and general; but others, notably the fathers at San Luis Rey, San Fernando, and San Carlos, show an exactness of knowledge that argues not only a long acquaintance but an interest in the Indian as such. It is of such replies that the extracts here given largely consist. They are only a minor part of the entire document. Other passages, dealing with the converted Indians, belong more properly to the realm of the historian of the missions than of the ethnologist; and the remainder would be of no great interest to either. In regard to what is presented, it must be admitted that many of the replies from different missions are practical duplications, and that but few are answered as a modern ethnologist would answer them; but all are truthful, some discriminating, and few prejudiced; and above all we have here, put down by observers on the spot more than eighty years ago, what the best ethnologist of today could not obtain more than fragments or traces of. Back of San Diego and San Luis Rey there are still Indians who preserve memory of the past; but in the remainder of the mission region, from San Juan Capistrano to San Francisco, the Indians are gone, nearly gone, or civilized and Christianized into a state of oblivion of ancient customs and beliefs. How little that is specific do we know of the Chumash and Costanoan and Esselen Indians! How much less of those of Salinan stock, whose former life has vanished with scarcely a trace! It is for this reason that these replies of the Franciscan fathers, however unconnected, and however incomplete, are of value.

The Spanish of some of the missionaries was not always above reproach. They used provincialisms and terms now obsolete. Their spelling was at times more phonetic than orthographic, and hasty punctuation has made some interminable sentences. One and all they wrote as they thought, simply, truthfully, and without regard to style. The copyist, or several, through whose hands their unvarnished statements are at present preserved at the University, have evidently at times added to the difficulties of the manuscript and contributed their share toward an occasional sentence that it is hard to make much sense of. Thanks are due Professor J. T. Clark for assistance in unravelling some of the more difficult passages.

The Bancroft Library is without a systematic catalogue, and it has not yet been possible to provide any arrangement by which a given work or volume can be readily found at will. This condition renders it difficult to use the many valuable books in the Library, and almost impossible to carry on extended work with the still more valuable manuscripts. There is little doubt that the Library contains among its buried treasures a number of unpublished manuscripts that will prove to be of importance to the ethnology of California and the Pacific Coast. It is hoped that the present contribution may stimulate interest in this important collection, and may call attention to the larger opportunities for the increase of knowledge that will be furnished when it shall be possible to equip the Library with that indispensable key to its usefulness that at present it lacks—a complete catalogue.

San Diego.[2]

The language which the Indians of this mission speak is the

[2] The replies made to the interrogatory from San Diego were probably received too late to be incorporated with the other reports, for they are found separate in another part of the Archives, volume III, page 27, of the Miscellaneous Papers. The fathers in charge of San Diego about 1814 were Fernando Martin and Jose Sanchez, according to Engelhardt's Franciscans in California, from which the data of a similar nature given below are also taken.

San Diego is the southernmost of the Franciscan missions of Upper California, the earliest founded, and the only one in the territory of the Yuman linguistic stock. From it are named the Diegueños, or Yuman Mission Indians, who survive today to the number of several hundred.

Man dialect. It is so called because they say faâ for yes and man for no.[3]

They have a great desire to assemble at a ceremony regarding a bird called vulture (gavilan). This ceremony begins with a search anxiously made for this bird, and they invite one another to seek it. This arises from the fact that there are at the mission certain keen neophytes, who, however, are lazy when it comes to work, such as gathering the seeds on which they live. Desiring to have what they can feast with, these have made use of the opportunity of hunting the said bird in order to seduce the more simple-minded ones. They tell them that this bird is a person, who can free them from their enemies and bestow upon them whatever they ask of him. However false this belief, they hold to it with great pertinacity, wherefore they cherish the bird with as much care as the best mother could show for her son. As soon as they have captured it, they bring it the best of what they have obtained in the hunt and in their food gathering. When it is well nourished, and grown, they kill it, and for its funeral they burn it. While it is in the bonfire, those who have assembled offer to it seeds, beads, and whatever they esteem most. In the following year they search for another vulture, and do the same with it. The means which has been found for separating them from these follies, is to set some good Indians to watch, and to chastise severely and in public those who gather for the occasion.[4]

Although this land is favored with many medicinal herbs, they do not use them nor did they ever use them.[5] There are certain

[3] This designation of the language does not appear to have survived. The Diegueño word for yes is e, or khan, good, and for no, umau or arkhamau. Man should therefore probably be read Mau. The sound f does not occur in the Yuman languages.

[4] Drastic; but if we remember that it was not the fathers' business to sympathize with the Indian's civilization or to study it, but to bring him, for his own supposed good, to another way of living and thinking, our censure will not be severe, however such practices conflict with modern principles. The bird, as among the neighboring Luiseño, is more probably the eagle than the California condor, which the word gavilan properly indicates; the ceremony is an annual one, common to most of the Mission Indians of Southern California, and held in memory of the dead. The San Luis Rey report describes the ceremony more fully.

[5] This is probably an extreme statement, but it is well known that Indian medicine depends far more on ceremonial or shamanistic practices, such as the sucking described below, than on any pharmaceutical remedies.

neophytes who are sagacious but very bad workers.[6] These persuade the others that they can cure them. Such are called guisyay, that is to say, wizard. Their method of doctoring is this. When they know that someone is sick, the patient goes to the cusiyay[7] or his relatives call him. This one takes in his mouth a stick or piece of wood or skin. He turns to the part of the body which is in pain and begins to draw and suck it. When he removes his mouth, he shows to the patient what he has been carrying in it, persuading him that it was this which hurt him. With this the patient remains much calmed and contented, believing that he is already free from his sickness. From this it is to be inferred that their greatest physical infirmity, and that which most destroys them, is melancholy or fear;[8] but the most common illness among them is venereal sickness.[9] Since four years there have been more deaths than baptisms. In this last year of 1814 the dead numbered one hundred and eighteen, those baptized seventy-five, adult pagans baptized being included in the latter number.

They are exceedingly desirous (apasionados) of preserving the customs of their elders.[10] They say that they came to these lands from the north.[11]

They do not observe any ceremony in their funerals. All that they do, and that by the affected indifference of the missionaries, is to throw some seeds in the shroud of the dead. They do this with loud weeping, which they keep up for some days.

[6] It will be seen that the father has a fondness for giving this explanation of Indian religious practices that meet his disapproval.

[7] Probably the same as guisyay above. The word has been obtained as kwisiayu by the author.

[8] An interesting confirmation of an opinion held by many ethnologists regarding most people that are primitive.

[9] Needless to say, derived from the whites. The virulence of this disease among the Indians would be sufficient evidence of its newness to them, even if this fact were not confirmed by general contemporary statement.

[10] The Indians of Yuman family probably show this trait more strongly than any others in California.

[11] The common tradition of the Indians of Southern California, except the Mohave, who derive their first origin from the west. The Indians of Lower California are also said to have believed that they came from the north.

The Indians (indiada) are much inclined to pride and rancor. The men pursue one another with death for jealousies and other vexations. When the women are angry with their husbands, or these have become attached to other women, they revenge themselves for their injuries by depriving themselves of life.[12]

No other idolatry is found among them than the vulture ceremony which has been described. The rite which they use in their funerals is to burn the body. While it is blazing, they throw seeds on the fire and cry out to the accompaniment of floods of tears, which may continue for days or even months.[13]

These Indians do not have, nor did they have, any musical instruments, except a sonajilta (timbrel) of a disagreeable sound.[14]

San Luis Rey.

The language of this mission is called Lamancus.[15]

Fights arise over any sort of trifle, and they readily kill one another.

[12] Suicide among many Indians is most frequent among women disappointed in love.

[13] Cremation was the mode of disposing of the dead in vogue, at the time of discovery and settlement, among the Indians of Lower California and all of southern Upper California except the Chumash. Numerous burials have been found in Santa Barbara and Ventura counties, and on the Santa Barbara islands; but from about Los Angeles south, and eastward across the state, the scarcity of human remains is such as to be conclusive evidence of the prevalence of cremation, even were the confirmatory evidence of observers lacking. Under mission influence, of course, graves soon replaced the funeral pyre.

[14] Drums are not known from Southern California, though baskets were sometimes beaten or scraped. Rattles were of turtle-shell or gourd.

[15] With San Luis Rey we enter Shoshonean territory, in which the three following missions were also situated. The Luiseño are the only group of California Indians besides the Diegueño to have been brought under mission control and to survive in any numbers. The account here given is probably from the pen of Father Antonio Peyri, who was for many years identified with San Luis Rey. Father Geronimo Boscana, author of the important account of the religion and customs of the neighboring San Jaun Capistrano Indians (in A. Robinson, Life in California, 1846), was at San Luis Rey from 1812 to 1813. The name Lamancus is not known. The only native name ordinarily given for this language, or the allied dialect of San Juan Capistrano, is Ne-tela, my speech, or Cham-tela, our speech.

They throw seeds, beads, and other objects into the fire in which they burn their dead.

We have not observed any other idolatry among these Indians than that connected with certain birds which they call azuts, which really are a kind of very large vulture.[16] At the right time, while still small, they take them from the nest (according to what they say there are never more than two), and he who has captured them presents them with many carabanas to the chief of the village. The chief raises them with much attention and care until they are grown up; when, being of good size, the Indians make their great festival with the following ceremonies.

The night before the festival they put the azuts or vultures in the middle of a large circle of themselves. While they dance and sing a very miste song, and while old men and old women are blowing out towards all points of the compass, and making a thousand strange faces and grimaces, they very slowly kill the birds. When they are dead, they extinguish the fire and all break out in wails, shouts, and outcries, as if they were crazy, waving firebrands and striking blows as if they were furious, in such a way as to cause horror and confusion. After a considerable space of time during which this extravagance lasts, they again light (atizar) the fire. They skin the birds and throw their flesh on the fire. Meanwhile they begin to sing again, and with somewhat more suavity. They keep the feathers of the birds with much escovra and veneration until the following day, when they make a sort of skirt of them. This skirt they put on a boy during the days that the ceremony lasts. Wearing this skirt, he dances in

[16] Azuts are really not vultures, that is, condors, but eagles. Ashwut is Luiseño for eagle, yungavaiwot for condor. The author's Luiseño and Diegueño informants always mentioned the eagle as the bird connected with this ceremony. Boscana, however, describes the bird as much resembling the common buzzard, but larger, which clearly makes it the condor. It is not unlikely that both species were used. The annual eagle ceremony, the central feature of which is the slow pressing to death of an eagle in the course of the night, has already been mentioned as one form of mourning ritual practiced by most of the mission tribes of Southern California. Boscana, in the dialect of San Juan Capistrano, calls both ceremony and bird panes. The dance in the eagle-feather skirt, paelt, Luiseño palat, is also described by Boscana. A Luiseño dance made in remembrance of a chief, in which one man wearing the palat dances alone, is called Morahash. The boys here described as wearing the eagle-feather skirt were probably initiates of the puberty ceremonials.

the middle of a great circle of Indians, who make turns (dan vueltas, make short excursions) in time to the measure to which the boy is dancing in the center. They make this dance at intervals, and other boys who have been assigned to this take the place of the first boy. After the ceremony the chief of the village keeps the skirts with great veneration or a species of idolatry. We made the most careful efforts to ascertain the purpose of this ritual, but we have never been able to extract anything else than that thus their ancestors made it.

In order to win in their games of obligations (empeño) they drink a liquid which they call mani, made from the root of toloache pounded and mixed with water.[17] This drink renders them inebriated, and at times they give forth what they have in the stomach. In the state of intelligence, from which they depart with this nonsense, they say that because the other fasted and drank more.[18]

These Indians do not use any sort of unusual drink, other than that made from toloache or mani. This drink does them so much damage, that if they drink a quantity, and do not vomit, they die in their intoxication, foaming at the mouth.

[17] The drinking of *Datura meteloides*, the common jimson-weed, Spanish toloache, is the most important act of an initiation ceremony for boys, held formerly by probably all the Indians of California that today are known as Mission Indians. A somewhat similar ceremony is practiced by the Yokuts Indians of the southern San Joaquin valley. The Mohave and Chumash used the plant for religious purposes, but are not known to have employed it specifically in connection with an initiation ceremony. The religious importance of jimson-weed among the Indians of Southern California, may be judged from the fact that almost all their public rituals are either mourning ceremonies, or puberty initiation ceremonies related to this one. The effect of jimson-weed is sometimes loosely compared to that of alcohol, but differs in that it quickly produces unconsciousness and visions, and if taken in excess not infrequently causes death, as our missionary informant states. In the jimson-weed ceremony the young men received knowledge of the religious beliefs and practices of their tribe. The plant was also used as a medicine, especially in the case of broken bones. The Cahuilla say that it was taken by them for practical motives like that here mentioned, namely, to become rich and be successful in worldly matters. The plant is called mani, manit, or manich by all the Shoshoneans of Southern California, except the Cahuilla, who name it kiksawal.

[18] The manuscript reading is confused here, apparently through an omission: cuya bevida los pone ebrios y veces provocan quanto tienen en el estomago, en la inteligencia, que se con este disparate pierden, dicen que porque el otro ayunó y bevió mas.

When there is an eclipse of the sun or of the moon they shout with very loud outcries, making noises by clapping their hands and in other ways. On being asked the reason, they have always answered us that they believe that an animal was trying to eat the sun or the moon, and that they did these extreme things in order to frighten him, thinking that if he ate them they would all perish.[19]

The method observed by these Indians in their illnesses is as follows: For external matters, such as wounds, they make a tight bandage above the wound, with the end that the illness may not go up higher. In addition they most commonly use one of the following remedies: a plaster of tule leaves, which they call pibut, cooked and chewed; at other times they use the wild onion, queheyaguis, chewed and made into a plaster. There is another herb which occurs on the seashore. This they burn and put the ashes on the wound. We do not know the name of this plant, but they call it chaeca. If the wound is a burn (quemadosa) they follow the same treatment as regards the ligature, but in addition they put on powdered prickly pear (tuna) leaves, naboi, or more often powdered excrement of the jackrabbit or rabbit, tosoyat posa. Others use leaves of sage (salvia), cosil. If the trouble is the bite of a poisonous animal, they use, again in addition to the ligature, a stone similar to lapis, xaclul. This stone they soak in the mouth, and when it has become wet they apply some of the moisture to the wound. They do the same for wounds from poisoned arrows. If the sickness is a swelling, they still do not forget the ligature, and in addition anoint with ointment or oil of the seed of the gourd (chilicote), ennuix, until it rabierta or esparrama. In the case of internal illnesses they tie up very tight the part of the body which most hurts them, which we have observed to be most commonly the capa. They use also certain powdered roots, which they drink mixed with water and with the following: the root of the mangle (mangrove?), hechis; of the elder (sahuco), crita; of the wild rose of Castile, husla; of wild

[19] Compare the same statement below regarding the San Juan Capistrano Indians, and what Boscana says on page 298. Compare also the prayer or formula sung by the Tachi Yokuts at an eclipse of the sun, present series, II, 374.

cane, hiquix; and of the plant called hial.[20] They say that these drinks are all purgatives, and the root of the mangle also very provocative to vomiting. They do not make use of blood-letting. They have certain doctors (curanderos), who suck the sick person wherever he feels most pain, and presently they extract from the mouth blood, or sometimes pebbles, sticks, bones, or bits of skin, which they have deceitfully provided themselves with before. Making the patient believe that this was the sickness, they presently blow towards the four winds, and the sick man remains well satisfied, although sicker than before. They make him keep diet so rigorously that ordinarily they do not give him anything to eat unless he asks for it. They also practice the superstitions of dances, songs, and breathings for the sick, while a wizard makes a thousand faces over him. Thus, when the first remedies do not avail, and one of these medicine-men is employed, he does not give over until he has killed the patient and made of him a martyr to the demon. In short, in the matter of their superstitions regarding sickness, idolatry, and witchcraft, they are so rare (raros), full of deceit, and reserved, that although I have been among them since the foundation of this mission, that which I can most readily manifest regarding these matters, is my ignorance of them. They never confess more than what they cannot deny.

They have an idea of a rational soul, which they call chamson, and believe that when they die this goes below to tolmar,[21] where all come together and live forever in much happiness. With this they have, however, no idea of reward or punishment.[22]

[20] The Luiseño dictionary of P. S. Sparkman gives pivut, a rush, *Juncus mertensianus;* kashil, white sage; navut, prickly pear; enwish, chilicothe, *Echinocystis macrocarpa;* kutpat, elder; ushla, wild rose; huikish, *Elymus condensatus,* a species of cane used for arrows.

[21] Chamson means "our heart," from cham-, the possessive prefix of the first person plural, and -sun or -shun, heart. The analogous term nu-shun was given the writer by a Luiseño informant as meaning my soul, "alma mia." Boscana, 317, gives pu-suni, his heart, as the San Juan Capistrano term for soul. The Sparkman Luiseño dictionary translates tolmal as a place in the center of the earth where some people go after death.

[22] In which they agree with almost all Indians.

San Juan Capistrano.[23]

We know that they adore a large bird similar to a kite, which they raise with the greatest care from the time it is young, and they hold to many errors regarding it.[24]

When a new moon shows itself they make a great outcry, which manifests their interest (negosijo). If there is an eclipse of the sun or of the moon, they shout with still louder outcries, beating the ground, skins, or mats with sticks, which shows their concern and uneasiness.[25]

San Gabriel.[26]

In this mission four distinct idioms are spoken according to the four directions of its establishment. One is called Kokomcar, another Guiguitamcar, the third Corbonamga, and the last Sibanga.[27]

[23] The Indians of San Juan Capistrano have sometimes been known as Juaneños. They speak a dialect similar to Luiseño. It is regarding them that the missionary Boscana has left the invaluable account that has been mentioned. The fathers in charge of San Juan Capistrano about 1811 were Francisco Suñer and Jose Barona.

[24] The large bird similar to a kite is no doubt the eagle or condor as among the Diegueño and Luiseño.

[25] The "outcry" at the appearance of the new moon is more fully described by Boscana. Racing by the young men formed a feature of the occasion. Boscana also mentions the concern felt at the time of an eclipse.

[26] The Indians of Mission San Gabriel were closely related in dialect to those of San Fernando. The two constituted a dialectic group which has been called the Gabrielino, and which is distinct from the other Shoshonean linguistic groups of Southern California. As will be seen, there were however other Indians at San Gabriel besides the true Gabrielino. The fathers in charge of this mission in 1811 were Jose de Miguel and Jose Maria Zalvidea.

[27] The four dialects spoken by the Indians assembled at this mission can be partially identified. Sibanga is the name of the site of San Gabriel itself. It is a local, not a tribal appellation, as is shown by the locative ending -nga. Hugo Reid in his account of the Indians of Los Angeles county, printed in the Los Angeles Star in 1852 and reprinted by Alexander Taylor in the California Farmer, gives Sibagna as the native name of San Gabriel. Guiguitamcar, or Guiquitamcar, is a good Spanish spelling of Gikidan-um, with the suffix -car substituted for the plural ending -um. Gikidanum is a variant obtained by the author for Gitanemuk, the name of the Shoshoneans on upper Tejon creek, at the southernmost end of the San Joaquin valley. These Indians speak a Serrano dialect. Their neighbors south of the Tehachapi range, that is towards San Gabriel, are also Serrano. A vocabulary of this dialect has been given in Volume IV of the present series of publications. The Kokomcar are unknown. The ending which this name shares with Guiguitamcar makes it seem that these people were also Serrano. Corbonamga is also unidentified. The ending may be the Gabrielino locative -nga. There is a possibility that either this term or the last is a copyist's misread spelling of the name Cucamonga.

Notwithstanding that in general they are ignorant of their origin, there have not been wanting some who declared that they had knowledge that the first Indians populating this country came from the north, whence they were conducted to these lands by a great chief (capitan general), who they say still exists on an island, and they make him be without beginning or end. This one distributed to each tribe its territory.[28]

When a celebrated captain dies, they summon the nearest villages, even if they are remote, and make a great festival, which consists of dancing and eating. They either bury the body, or burn it and bury its ashes. The dance and feast continue for a space of three days, after which the deceased remains in eternal oblivion.[29]

They are not acquainted with any other musical instrument than a whistle made from the bone of the foreleg of a deer, and a wooden fife (pifano).[30]

San Fernando.

The Indians of this mission speak three distinct tongues.[31]

The foods which they use are acorns; pine-nuts; chia (seeds of sage), called pasill in their language; islai, called chamiso by

[28] The great "capitan general" is no doubt the Gabrielino equivalent of the Juaneño and Luiseño deity Ouiot or Wiyot, who according to tradition led the people from the north and divided them into tribes.

[29] It is probable that cremation was the usual practice in pre-mission times. That the dead should be forgotten and their names never mentioned, is a universal custom of the California Indians. The accounts below from San Fernando and San Carlos give different explanations of the motive for the practice.

[30] The bone whistle is of the kind which may still occasionally be found in ceremonial use among the modern Indians of California. Many have been unearthed in archaeological explorations in Southern California. The "wooden fife" is no doubt the open-ended flute made by all the Indians of California, and more accurately described in the accounts from other missions below.

[31] While the Indians of San Fernando have been called Fernandeños or Fernandinos, their dialect was little different from that of San Gabriel, and the general term Gabrielino can be applied to both. There were also Serrano Indians at San Fernando. In fact it seems not unlikely that they may have been as numerous as the Gabrielino-speaking natives there. What the third language was which is mentioned as having been spoken at this mission, can only be conjectured. It is not unlikely that it was Chumash, for it is but a few miles westward from San Fernando to Chumash territory. The missionaries at San Fernando who might have written the present account were Martin de Landaeta, Jose Antonio Urresti, and Pedro Muñoz.

them; and numberless others. Of meat they eat deer, coyote, antelope, jackrabbit, rabbit, ground-squirrel, rat, dog, all birds, moles (topos), snakes, and rattlesnakes; and those of the coast are fond of all kinds of fish, especially whale.[32]

The musical instruments which they use are a flute of elder, certain little sticks, and whistles of deer bones.[33]

Nowadays they do not burn the dead as they did at the beginning of the conquest; but they do still put seeds with them at burial.

When an unconverted Indian dies, they make a deep hole for him. Into this they put a pot, a basket, an otter skin, and some two or three pesos worth of beads, above these the dead body, and this they cover with earth. Then they immediately give notice to all the villages of the district, that all, old, young, and children, are to paint for a general feast. In this feast every kind of seeds and meat is served, and the chief commands all most rigorously never to name the deceased, in order that he may not come to annoy them (arrastrarlos). Note: All should arrive weeping. At the end they burn the house and everything that the deceased possessed.

We have observed the following superstitions. In order that their faces may not be burned, they paint themselves with red ochre (almagre) and other colors. In order not to become tired in climbing hills, they carry a stick or stone. To hunt deer, they drink salt water and a plant which the Spanish call toloache and they manit. With this they intoxicate themselves. They take it in order to make themselves strong, to receive injury from nothing (tomer a nadie), that the rattlesnakes may not bite them, the bears not chew them, and that arrows may not enter their bodies.

[32] Chia, pasil, has been mentioned above. With "islai, called chamiso by them," compare R. S. Sparkman's "*Prunus ilicifolia*, Luiseño chamish, Spanish islaya." It is interesting that the bear is not given in the list of animals eaten. Many California Indians refrain from eating the bear on account of its human resemblance. Some did not eat the coyote, and those of northwestern California regarded dog meat as virulent poison.

[33] The "certain little sticks" may have been rattles made of a partly split stick, after the manner of a clap-stick. Such instruments were used by many California tribes to accompany dance songs.

According to information their gods are five and one goddess. They are called Veat, Taimur, Chuquit, Pichurut, and Iuichepet, husband of the goddess Manisar, and she is the one who gives them their seeds.[34]

The best known medicines are:

Vespibat.[35] This is composed of wild tobacco, lime, and oxide of iron (orinas) mixed together, which ferment. They take it to relieve themselves of pain in the stomach, as well as for wounds.

Chuchupate (an umbelliferous plant), called cayat in their language. This is a plant which on every stalk has three round leaves, each with a spike in the middle. The flower is white. They chew the root and rub themselves gently where they suffer pain. They also use it for headache.

With the anise plant they purge themselves.

With the herb called del pasmo (convulsion) they drive away toothache of the molars. When cooked they take it to sweat, and when crushed as snuff (como polvo de tabaco).

[34] Unfortunately the manuscript is not entirely clear. Chuquit may be read Chuguit or Chugerit. Iuichepet may be Inichepet or possibly Quichepet. On page 372 of the second volume of this series of publications is given a prayer, in the Yauelmani dialect of the Yokuts language, obtained from a man who had lived at Tejon, in intercourse with the Shoshonean Indians there. This prayer begins by calling on seven deities, whose names may be rendered, in untechnical orthography, Töushiut, Bamashiut, Yokhakhait, Echepat, Pitsuriut, Tsukit, and Ukat. Two or three of these terms look as if they might be Yokuts, but the etymology of none can be certainly explained in that language. The r in Pitsuriut is not found in Yokuts. At least part of these Yokuts terms therefore appear to have been borrowed from Shoshonean tribes. The names here given by the San Fernando father show the source of this borrowing. Chuquit of the San Fernando list is Yokuts Tsukit. Pichurut is Pitsuriut, and Iuichepet is Echepat. Veat is clear in the manuscript, but is probably intended for Vcat, that is, Ucat, with which the Yokuts Ukat would be identical. Taimur and the goddess Manisar have no Yokuts equivalents, and the three first names in the Yokuts list, Töushiut, Bamashiut, and Yokhakhait, do not occur among the San Fernando names. A distinction seems to exist among the Yokuts between these first three names and the borrowed four; for in a formula spoken in the Yokuts jimson-weed ceremony, given on the page following the prayer, only the first three are mentioned. The usual ceremonial number of the Yokuts is not seven but six, the number of the San Fernando deities. Ukat, the informant stated, was the sister of the others. A Serrano recently seen at San Manuel reservation in Southern California, mentioned six large stones that were once diosas, goddesses. These stones are at Nanamüvyat, in or near Little Bear Valley, but he had forgotten their names. The Yokuts correspondences make it more likely that the six San Fernando deities were Serrano than Fernandeño proper.

[35] The word vespibat is not otherwise known, but suggests pivat, tobacco, one of the components of the medicine.

Chilicote (*Echinocystis macrocarpa*), called yjaihix in the native language, they use mixed with dust of the stone called pafa, or paheasa in native dialect. They employ this for reducing inflammation, for driving away cataracts (nubes de los ojos), for wounds, to bring on menstruation, to cure themselves of urinary sickness, and boiled they take it to sweat (humederse).

Those who suffer from venereal humors, the syphilitic (convenerados), and the crippled, purge with mingled dust of alum stone and copperas (piedra alumbre y alcaparrosa).

When they feel heavy they bleed themselves with a flint.

When they are restless they refresh themselves with water from the bark of the ash tree.

When they suffer side pains they take red live ants in water, and apply them alive externally, and strike themselves with nettles.[35a]

They do not drink thermal waters, but they do bathe in them.

Among their principal diseases is syphilis (humor galico), of which a considerable number die. They are most often sick in the spring.

Santa Barbara.[36]

They bury the dead with all their pots and other poor jewels.[37]

[35a] Counter-irritants are not infrequently used by other Indians. The Mohave burn themselves with a glowing stick. Ants and nettles are used by the Luiseño and Juaneño as an ordeal in the initiation ceremonies for boys.

[36] With Santa Barbara the Shoshoneans are left behind, and the territory of the Chumash is entered. The missions of Santa Ynez and San Luis Obispo, as well as those of San Buenaventura and Purisima which are not here represented, were also in Chumash territory, and recruited chiefly from the Chumash Indians of the mainland and of the northern Santa Barbara islands. The fathers of Santa Barbara about the time this report was written were Luis Gil y Taboada and Marcos Amestoy.

[37] This is the first mission we have encountered where burial is the native mode of disposal of the dead. The practice continues as far as San Luis Obispo, after which cremation is again in practice as far as San Francisco, and in fact to the north of it beyond the sphere of mission influence. It is accordingly evident that the custom of cremation was distinctive of the Indians in the mission portion of the California coast, except only the Chumash. Archaeological investigations confirm the statements of early eyewitnesses. Numerous graves have been found in the Chumash region, but scarcely any in the regions to the north and south; except in certain layers of the shellmounds bordering San Francisco bay, in which region both cremation and burial seem to have been practised according to circumstances or period.—By "pots" are meant steatite vessels, not pottery, which has not been found so far north on the coast. The same explanation may apply to the "pots" mentioned above by the San Fernando informant.

They do not have chiefs (caziques), but in every village or town there are one or more who are called captains (capitanes). Not, however, that they have any authority over the rest, nor do these obey them or recognize them in any matter. Only he [is chief] who has charge of gathering the people when there is a prospect of a fight with another village, and to said chiefs the rest give beads at the dances or feasts which they sometimes make.

Santa Ynez.[38]

When the rancherias were still inhabited by unconverted Indians, there could be seen in various places bunches of feathers or plumes attached to sticks, which might be called their idol-temples (adoratorios). There they cast seeds and beads in order to obtain good harvests of acorns and other seeds which the fields produce of themselves, and which were their daily nourishment.

They neither knew or used any other musical instrument than a tube of wood resembling a flute, open at both ends and producing a buzzing quite disagreeable to hear; also a whistle (pito) of a limb-bone of some bird.

San Luis Obispo.

Fifteen different languages are spoken in this mission.[39]

I have found some wind instruments made of elder sticks.[40]

Notwithstanding that the Indians in their native state hold lands according to their families, there is no necessity of agreements to sow, as there are wild fruits on them; and if something

[38] The missionaries at Santa Ynez about 1811 or 1812 were Jose Antonio Calzada and Francisco Javier de Uria.

[39] The report on the Indians of San Luis Obispo was probably written by Father Luis Antonio Martinez. His companion, Antonio Rodriguez, did not come to San Luis Obispo until 1811. The San Luis Obispo Indians were Chumash, though the dialect of the vicinity of the mission differed markedly from those of Santa Barbara and Santa Ynez. It is difficult to conjecture what the fifteen languages mentioned can have been, unless they were slightly different dialects of Chumash. The number and distribution of the dialects of this family are very little known. It has been suspected that the dialects were numerous, and the present statement seems to be confirmatory. The only Indians other than Chumash likely to have been brought to San Luis Obispo, would be of the Salinan and Yokuts families.

[40] The wind instruments made of elder sticks are the flutes mentioned previously and again below.

rich is produced, it causes many wars if anyone has the boldness to go to collect the crop without previously paying or notifying the legitimate owner.[41]

There are all kinds (espiras or esleras), poor and rich, but among the rich there is in each village one to whom all look up and whose voice is respected by all such as are found living with him. To him, I do not know according to what rules, all offer tribute from their fruits, goods, and beads. Such men summon to the ceremonies all those who gather, and who are actually their friends. If by chance any one of these refuses the invitation, arms are resolved upon; and with the approval of his people the chief takes the road to avenge the injury which the other has done him by not accepting the invitation.[42] He deprives of life not only the chief but as many as are gathered with him. For all services they have no other reward than to look upon him, who has had the good fortune to kill some one, as a public person.

The Indians of each settlement or village have cemeteries marked out with boards or stones. They also have songs and ceremonies for burying the dead. They make a distribution of beads to all who have come together to assist in bringing the body to the grave. There is one, he who raises it on his back, who has for his particular duty the obligation of opening the grave. I have not been able to ascertain what their songs mean in our language.

[41] The translation has been given according to what appears to be the meaning of the text. This reads: Sin embargo de que los Indios tienen tierras por familias en su gentilidad, como son frutos silvestres no tienen necesidad de contratos, para sembrar, y si un objeto poderoso que produce, no pocas guerras, si alguno tiene el arrojo de ir à coger sus frutos sin pagar, y avisar, antes à su legitimo dueño.

[42] The statement that the rich man is the chief, is in accord with observations from almost all parts of California. The dependence of social rank on wealth seems, however, to have been greatest in this southern region and in northwestern California. The other missionaries contributing to this report make no mention of similar conditions. That the refusal of an invitation should cause war, seems also to indicate a greater influence and higher social position of the chief than among many California tribes. In most parts of the state it is very doubtful whether the inhabitants of one village would have been likely to commence war with those of a neighboring settlement merely on account of a slight put upon the dignity or prestige of their chief.

San Miguel.[43]

The neophytes at this mission speak four languages: that of San Antonio, which is reputed the principal one; that of the shore (la playana), which is the one spoken by those settled on the coast; the Tulareño; and another, that of the people of the south.[44]

The money of the Indians has been, and still is, beads, which they now lend without usury. In their wild state, usury consisted of the daily augmentation of the value of the amount lent, for instance a real of beads; and those who lent the real grew richer by as many reales as the original real was days in returning to their hands. This custom was practiced by those to the east of this mission.[45]

San Antonio.[46]

Two distinct languages spoken by the Indians are known: the predominant language, that of the site of the mission, which is understood to the east, south, and north and the circumference of the west; and the less important, which those speak who are called 'beach people' (playanos), on account of having come from the bays of the ocean. These are few in number, and not only understand the predominant language but also speak it perfectly.

They were as easily married as unmarried. For the former, nothing more was required than that the suitor should ask the

[43] San Miguel was in the territory of the Indians of the so-called Salinan stock. No general name of native origin is known for these people, who go under their present designation only because they lived in and about Salinas valley. The father who wrote the above reply was either Juan Martin or Juan Cabot.

[44] Of the four languages, the Tulareño is that of the people in the Tulare valley, namely the Yokuts. The people of the south are probably the most northwesterly Chumash, some of whom may have been brought to San Miguel instead of to San Luis Obispo. The language of San Antonio is Salinan, and that of the coast evidently so. Both are mentioned again in the replies from San Antonio. Nothing is known of the coast language of this region, nor about the dialectic divisions of the Salinan family, other than that the dialects ordinarily called those of San Miguel and San Antonio were somewhat different.

[45] No such custom of borrowing at interest has been otherwise reported from California.

[46] San Antonio is the northernmost of the two missions in Salinan territory. The missionaries there who might have contributed to this report were Pedro Cabot and Juan Bautista Sancho.

bride from her parents, and at times it sufficed that she of herself should consent to join herself to the man, though more often verbal communication or agreement (trato) preceded. Many of them did not keep their wives. Some, when their wife was pregnant or had given birth, changed their residence without taking leave, and married another. Others were married with two, three, or even more women. It is certain that there are many who have come [to the mission] from the mountains already married, and who could serve as an example to the most religious men.

There were some few who set out food for the dead.

From their native condition they still preserve a flute which is played like the dulce. It is entirely open from top to bottom, and is five palms in length. Others are not more than about three palms. It produces eight tones (puntos) perfectly. They play various tunes (tocatas), nearly all in one measure, most of them merry. These flutes have eleven [*sic*] stops; some more, and some less. They have another musical instrument, a string instrument, which consists of a wooden bow to which a string of sinew is bound, producing a note. They use no other instruments. In singing they raise and lower the voice to seconds, thirds, fourths, fifths, and octaves. They never sing in parts, except that when many sing together some go an octave higher than the rest. Of their songs most are merry, but some are somewhat mistes in parts. In all these songs they do not make any statement (proposicion), but only use fluent words, naming birds, places of their country, and so on.[47]

[47] The description of the flute accords well with specimens that have been collected from Indians of other parts of California, except that it is very doubtful whether any such flute could produce eight tones or had as many as eleven stops. The California flute ordinarily has either three or four stops. The "string instrument" is the musical bow, played with the mouth as a resonance chamber, and reported also from the Maidu and Yokuts. When it is said that some sing an octave higher than others when they sing together, it is probable that women are meant. The use of disjointed words or names, many times repeated in songs, is frequent in California. On the other hand there are instances of songs containing several complete sentences, as among the Yokuts songs published in Volume II of this series.

San Carlos.[48]

At this mission there are seven nations of Indians. They are called Excelen and Egeac, Rumsen, SargentaRuc, Sanconeños, Guachirron and Calendo Ruc. The first two are from inland. They have one and the same language or speech, but this is totally distinct from that of the other five, who speak a common tongue.[49]

In the native state they ordinarily lived at war with one another.

[48] The mission of San Carlos, near Monterey, is so far as known the only one to which Indians of the Esselen family were brought, except perhaps that of Soledad. San Carlos is one of seven missions, extending from Soledad to San Francisco, founded in Costanoan territory. The following report, which is one of the most detailed and careful in the entire series of replies, appears to have been written either by Father Juan Amoros or by Father Vincente de Sarria.

[49] The seven "nations" are village communities. On account of unusual size or prominence, the names of these seem to have come to be chosen to designate somewhat larger groups that had no political organization or real coherence except possibly a distinct dialect. The first two, "from inland," who have the same speech, distinct from that of the others, belong to the Esselen family; the other five, who "speak a common tongue," are Costanoan. Excelen is evidently the same name as Esselen, which appears also in the forms Eslen, Ecclemach, Ecselen, Escelen, and Ensen. Originally probably only the name of a village-site, extended by the Spaniards to cover a group of people, it has come to be the recognized name of an entire linguistic family. This family was never large since known to history, and is the only stock in California to have become entirely extinct. However, only the lives of a few individuals separate several other families from the same condition, so that there is nothing peculiar in the fate of the Esselen. Egeac is the Ekgiagan given by Alexander Taylor as a village of the Chalone of Soledad, who, however, were Costanoan; -gan seems to be an ending, as it appears also in Eslanagan, Yumanagan, and Aspasniagan. The writer in 1902 was told by the Costanoan Indians at Monterey that Ekkheya was a former village-site in the mountains to the south. This accords with what is known of the Esselen territory. Rumsen or Rumsien is the name which has come to be used for the Costanoan Indians of the vicinity of Monterey. The few survivors state that it was applicable to the people, or a district, along Carmel river in the mountains south of Monterey. Rumsen and Eslen are the most commonly mentioned "tribes" at Monterey, which have by some, writing at a distance, been extended so as to divide a large part of California between them. In this more general sense they are about equivalent to "Costonoan and Esselen Indians at San Carlos mission." SargentaRuc is Sirkhintaruk, or Sirkhinta, also called Kakonta, a former Costanoan village at Point Sur. Kakon means chicken-hawk; ta is the locative ending *at*; and ruk, literally house, means village, or people of; or, as the writer's informants put it, Kakonta is Sur, Kakontaruk the Sureños, the "gente" of Sur. Guachirron is several times mentioned, as by Taylor, who speaks of the Goatcharones with the Ekgiagan. The writer's Monterey informants placed the Huacharones beyond Ekkheya. Calendo Ruc, finally, is Kalindaruk, a Costanoan village near the mouth of Salinas river. Like most the other terms in this list, it has generally been used to include the people of the surrounding district. Kalin is ocean, ta is at, and ruk, house, as in Sirkhintaruk. The name has also been written Calendaruc and Kathlendaruc.

The languages which there are among these seven nations are two, one called Rumsen, and the other Excelen, entirely different. For instance in Rumsen they say, muxina muguiant jurriquimo igest oyh laguan eje uti maigin. In Excelen, egenoch lalucuimxs talogpami ege salegua lottos tahezapami laxlachis. Both of these examples mean: "The men who shoot well with a bow are esteemed and well liked."[50]

The principal Indians are their chiefs or kings. Each nation has one. They obey and respect him all their lives. The position is inherited by succession, or in case of want of direct succession it goes to the nearest relative. In the native condition such a captain was the only one in his nation who could have and leave various unmarried women. If he had children from any one of them, she was the best beloved and he lived with her forever. However he had the privilege of going with unmarried women whenever he desired. The whole nation rendered him vassalage. He went ahead in war, furnishing bows and arrows and animating his people. He was regularly an excellent marksman with the bow.

There is a custom among the men of entering daily a subterranean oven which is called temescal. Into this they bring fire. When it is sufficiently heated, they go in undressed. Then they sweat profusely, so that when they come out they look as if they had been bathing. It is known that this is very beneficial to them. For some time the [sweat-houses] were forbidden, and many itches, tumors, and other epidemics were found among the men. On the [sweat-houses] being given back to them, hardly a

[50] The Esselen language is extinct. All that is known of it is collected in a paper on the Languages of the Coast of California South of San Francisco, issued in the second volume of the present series of publications. The sentence here added is therefore a welcome contribution, even though it does not yet yield to analysis. Egenoch is man and lottos arrow, according to the vocabularies. The mx in lalucuimxs is doubtful in the manuscript, also the g in ege, and the z in tahezapami, for which taherapami should perhaps be read. The Costanoan dialect of San Carlos and Monterey has been briefly discussed, under the name of Rumsen, in the publication just mentioned. Mukiamk is man, uti is they, ekhe is much, very, lauwan is bow, ius or iwis, not discernible in the sentence above, is like, love, tepek, also without parallel, is to shoot; -st and -n are verbal endings. Igest should perhaps be read iyest, and the end of maigin is not clear in the manuscript.

man with the itch could be discovered, and this is a disease common among the women and children, who do not use such sweat-baths. The women who have recently given birth employ another method of sweating. They make a hole inside of the house, put wood into it, light this, and put many heavy stones upon it. When the stones are hot, they cover them with much green verdure which makes a sort of a mattress. The woman who has given birth lies down on this with the baby. The mother sweats much and the child is kept warm.[51] They do this for six or seven days, and then are as agile as if they had not given birth, and this although their broths and foods are very poor.

They use a split stick like a distaff which serves them to beat the measure for their songs,[52] which, whether happy or sad, are all in the same time (tonata). For instance they sing as follows to the lively tunes, in which they mention their seeds or their asañas: *Bellota—a—a, bellota; mucha semilla—a—a, mucha semilla.* If the song is one of vengeance or bad wishes, which is very often, and from which many fights result, they sing, and dance to the same time, speaking evil of that nation with which they are on bad terms, thus: *Manco—o—o, manco*, or other words or defects which they know concerning the nation or person which they are comparing (contrapuesta).

The kind of idolatry which has been found among these natives is that they sometimes smoke, blowing the smoke to the sun, the moon, and to certain people who they believe live in the sky; and with this they say: "Here goes this smoke in order that you will give me good weather to-morrow." Thus also of the seeds which they gather and of which they make pinole or flour. Of these they throw a handful to the sun, the moon, or the sky, saying: "I send you this so that another year you will give me greater abundance." Thus they recognize in the sun and the

[51] This method of sweating used by women who have recently given birth, suggests the Luiseño and Diegueño practice at the girls' puberty ceremony, as described by Boscana and in an article by H. N. Rust in the American Anthropologist for 1906.

[52] The split stick is the clap-stick or rattle that has been previously mentioned. It is the dancing rattle of central California, as compared with the cocoon rattle used by the shamans of the same tribes.

moon influences bearing upon their necessities, and recognize also that in the sky there is another people which sends them what they wish, and for this reason they offer them flour, seeds, and tobacco smoke.

They have often been asked if they have heard tell anything of the place of their origin. To this all answer that they do not know. And this ignorance is not strange, for these natives hold it for the greatest affront that one should speak of their dead parents and relatives; to such a degree, that a boy whose parents should die while he is quite small, would have no one who would tell him how his deceased father, grandfather, and other kindred were called.[53] If they quarrel among one another, they say in order to be more vituperative: "Your father is dead (a ti se te murio tu padre)" and then they become more angry.[54] On account of these practices they have no way of retaining a recollection of their ancestors, the more so since when anyone dies, they burn all his clothing and property, and if he has animals, like chickens, dogs, or a horse, they kill them, and pull up his plants. If they are asked the reason, they say that it is in order that they may no longer remember the dead.[55]

Some of them gain a reputation as a doctor (curandero). The sick person calls such a one and lets him suck the part which is paining. Presently the doctor extracts a stone which he has hidden in his mouth, and says: "Look. This was the cause of your sickness. Inside of you was this stone." They receive pay for this deceit and the patient does not become well from it. Others sing and dance before the sick person. Others, old women, say that it is they who make fruits and seeds grow, and for this presents are made to them; and if by chance the year is barren in fruits, the old woman pretends that she is angered, making

[53] This might be literally true.

[54] Some such statement is the usual form which a deadly insult or curse takes among the California Indians, from the Yurok of the extreme northwest to the Mohave of the southeast.

[55] The reason here given for the destruction of the property of the dead, and the avoidance of his name, is the one usually obtained upon inquiry among the present Indians of California. That there were also other motives, appears from the preceding statement from San Fernando. The matter has been discussed in Notes on California Folk-Lore in the Journal of American Folk-Lore for 1906.

them believe that she has not wished to give them fruits; wherefore they feel themselves compelled to make her more presents in order to allay her displeasure and make her give them seeds the next year. If indeed this next year is a fruitful one, the old woman receives their contentment and approval and all humor her.

San Juan Bautista.[56]

They say that the first Indians to settle this country came from the north after a great flood;[57] that some went back and did not return; and that here sprung the single common language which is spoken in the seven missions about here, although somewhat changed [from place to place.]

They did not have chiefs. The bravest and strongest were those who went out to their wars. Every man acted as he wished.

Santa Cruz.[58]

At this place they ordinarily live on salmon and lampreys, of which there are many in the river which flows at the mission.[59]

Their dances are most insipid. They gather in a circle and without moving from the spot bend their bodies. They move their feet and make many contortions to the sound of their disagreeable voices, with which they do not form articulate words.

[56] The mission of San Juan Bautista is farthest inland of those in Costanoan territory. The dialect of San Juan Bautista, named Mutsun after a village near the mission, is known from a grammar and phrase-book prepared by Father Felipe Arroyo de la Cuesta, who is probably the author of the following replies, as he was at San Juan Bautista at the time the report was called for.

[57] That the Indians of this region believed in a great flood or primeval water, is corroborated by such information as there is in existence about their mythology. That they had a tradition of a migration from the north seems more doubtful, not so much because there is any positive information to the contrary, as that the most careful inquiries among nearly all the surviving tribes of central California have failed to reveal the existence of any migration legends or historical traditions. See the introduction to a collection of Indian myths of south central California, published in the fourth volume of the present series.

[58] The following was probably written by Father Andreas Quintana. Santa Cruz is in Costanoan territory, and so far as known was settled only with Indians of this family.

[59] Salmon and lampreys, ordinarily known as eels, were the most important aboriginal fish foods of northern California.

There are some among them, evil-minded old men, who instill them with a panic fear towards the demon whom they regard as the author of all evil.[60] That he may not trouble them, they make them believe that they must place a little of the flour which they eat, or of any other of their foods, on this stone or in that log in such and such a place. For the same purpose they sometimes hold secret dances at night, always without the knowledge of the fathers. It is known that at night the adult men alone gather in a field or wood. In the middle they place a tall stick crowned with a bundle of tobacco leaves, or branches of trees or other plants. At the foot of the stick they put their foods and glass beads. They prepare for the dance, tornandose their bodies and faces. When they are all gathered, the old man whom they look up to as their master or soothsayer goes out to give ear to the commands of the devil. Returning after a short time, he imparts to the poor innocents, not what he op [*sic*] of the father of lies, but what his own perversity and malice suggest to him. Thereupon they proceed to their dance, which they continue until day.

When an Indian wishes to marry, he goes to the house of her whom he desires for a wife and seats himself near her, sighs without speaking a word, and throwing at the feet of her father some beads,—which are small snails or pieces of shells strung on a thread—he goes out and without further ceremony or rite he is married.

Generally they are peaceful. They do not give quarter to the enemy. When one of these is killed in battle, they tear his limbs to pieces. They remove the top of the skull,[61] place it on a pike (pica), carry it in triumph to their village, y la pasean por todas las de sus abiados.

[60] The "demon who is the author of all evil" is of course a missionary conception, as are the "perversity and malice" attributed to the head man of the dances.

[61] Many of the California Indians did not scalp, but cut off the head or the skin of the entire head except the face.

Santa Clara.[62]

There are three languages at this mission, two of them related (bastante parecidos), and the third, which is of the east, totally distinct.

Sometimes they bury the dead, sometimes burn them.[63] As to whether they place food with them, we believe that they do not.

They do not know any distinction of superiority. Only in war do they obey the chief, and the wizards and magicians in matters of superstition. In everything else everyone does what he pleases. In their dissensions and disputes the strongest party wins.

San Jose.[64]

Only in war do they obey the most valiant or successful one, and in matters of superstition their wizards and magicians. Beyond this they admit no civil, political, nor even domestic subordination. In their quarrels they have no appeal, except to force, whence it follows that even those of the same family sometimes kill one another for nothing at all.[65]

It is said that only one village or nation, of the many that composed the population of this mission, adored the sun when it retired to the southern pole. They considered it angered, made a dance for it, and offered it seeds, until they knew that it had turned and was again approaching.

[62] Santa Clara is in Costanoan territory, but it is probable that Miwok or Yokuts Indians were brought here as they were brought to San Jose and San Juan Bautista. It is in this way that the third and totally distinct language mentioned is to be explained. The missionaries at Santa Clara in 1811 were Magin Catalá and Jose Viader.

[63] It would appear from the San Francisco account below, and from other evidence, that burning was the more customary.

[64] Mission San Jose, which was not at the present city of San Jose, but some distance to the north, was in Costanoan territory, but included in its population Indians of the Miwok and perhaps other families. Nearly all of the few descendants of the Indians once at this mission are Miwok. Fathers Buenaventura Fortuni and Narciso Duran were at San Jose in 1811.

[65] It looks as if this passage and the preceding paragraph from Santa Clara had had a common origin.

San Francisco.[66]

At this mission there were five languages.[67]

When married people separate, the children regularly follow the mother.

As soon as a person has stopped breathing, if he has few relatives or lazy ones, they bury him. Those who have friends or relatives who will bring wood, are burned. The little property that they have, and some few seeds, they burn with them, which is the more usual practice.

May 11, 1907.

[66] San Francisco was the most northerly of the missions in Costanoan territory, and in fact the most northerly of the Franciscan missions in California except that of San Rafael. The missionaries in charge in 1811 were Ramon Abella and Juan Saenz de Lucio.

[67] The five languages of this mission may have been the dialects of the five Costanoan tribes mentioned in Schoolcraft as gathered at this mission: Olhon, Ahwaste, Altahmo, Romonan, Tulomo.

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ETHNOGRAPHY OF THE CAHUILLA INDIANS

BY

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GEOGRAPHY.

The following notes are based on a trip to the Indian reservations in the vicinity of Highland, Banning, and Indio in Southern California. The specimens described and illustrated were secured, through the generosity of Mrs. Phoebe A. Hearst, for the Museum of the Department of Anthropology of the University of California. The reservations visited are inhabited by Shoshonean Indians, mainly speaking the Serrano and Cahuilla dialects. Indians speaking Chemehuevi, Gabrielino, and Agua Caliente were also found. The three groups of reservations, while within a stretch of less than a hundred miles, are in totally

different natural environments. Highland is in the cultivated and thickly populated orange-growing district of Southern California. Banning is near the summit of the pass connecting this region with the desert to the east. Indio is in the heart of this desert, below the level of the sea.

Highland is at the northern edge of the fruitful San Bernardino valley, and the small San Manuel Indian reservation near by is situated on the first foothills overlooking the valley. The character of this region is too well known to need description. It is only necessary to call attention to the difference between the level lands of the San Bernardino valley, which form part of the great highly cultivated plain of Southern California, and the Sierra Madre or San Bernardino range, rising abruptly to a height of ten thousand feet above this plain. While the higher portions of this range are timbered, the lower parts, especially the foothills, preserve the barren, brush-covered appearance which they have always had, and of which the valley must in some measure have partaken before its irrigation.

Banning is in the San Gorgonio pass, which affords the lowest natural entrance into the fruitful portion of either Southern or Northern California. This pass is in many ways remarkable, rising to only 2500 feet as compared with the 4500 over Tehachapi and the 5000 and more in the various Sierra passes. It is directly between the two highest peaks in Southern California, Mt. San Gorgonio, 11,400 feet high and little more than 12 miles away from Banning on the north, and Mt. San Jacinto, 10,600 feet in altitude, only 14 miles distant from Banning to the southeast. The pass is not, however, as might be expected, a wild gorge or canyon cut between these peaks, but a wide gradual slope with scarcely any water courses. At Banning, which is about six miles east of the summit at Beaumont and some 200 feet lower, the pass is several miles wide, flat, and with a perceptible but gentle slope to the east, which the railroad is able to climb without detour or approaches. While the streams from the San Bernardino range quickly lose themselves in the boulders and sand of the pass, the lower parts of these mountains are sufficiently watered and wooded to make them a favorable Indian habitation. The climate is cooler than in the San Bernardino

valley or in the desert, but all fruits hardier than oranges, and in some cases even these, are successfully grown. The Indian reservation is a few miles to the northeast of Banning. Its inhabited portion is at the edge of the foothills, though the reservation extends some distance back into the mountains.

From Banning eastward the character of the country changes rapidly. The pass gradually widens out into a broad plain, the Cabezon valley, which has much the surface character of a wide wash. The streams from the mountain disappear with almost miraculous rapidity in the stretches of boulders, gravel, or sand that constitute the soil. The vegetation is very scanty, the tree yucca being by far the most conspicuous plant. A strong wind is generally blowing from the west and is made particularly noticeable by the sand which the lack of vegetation enables it to carry. Some twenty miles east of Banning is Palm Springs station, some miles to the south of which are Palm Springs and the Agua Caliente Indian reservation. Palm Springs is at the very foot of Mt. San Jacinto on its eastern side. Some miles to the south is the famous Palm canyon, noted for the number and size of its native palms. This was the territory of a division of the Cahuilla Indians, some of whom still live at Palm Springs.

Some twenty or twenty-five miles farther on is Indio. Here one is below the level of the sea, in the supposed heart of the desert not far from the famous Salton sink. The rainfall is almost nil, many years passing without perceptible precipitation, and the heat of summer is intense, equalling that of the arid regions of southern Arizona and Sonora. But this region is really less desert than the district about Palm Springs station. The vegetation is much heavier and of a different character. The tree yucca is replaced by the mesquite, which will grow only where its roots can pierce to water. Throughout the entire low-lying region which constitutes the center of the Colorado desert water can be obtained at comparatively slight depths, so slight in fact that it was reached by the wells dug by the Cahuillas in aboriginal times. At present the greater part of this desert is becoming converted into valuable agricultural land through the sinking of artesian wells and pumps. The soil is not gravelly or made of the loose detritus from the neighboring mountains,

but the deposit of an old lake formerly connected with the Colorado river or the Gulf of California. Certain stretches contain much alkali, but others are exceedingly favorable for cultivation. Sand is found only here and there, most of the surface soil being a silt, in some places thickly covered with small shells. The two long ranges of mountains flanking this valley, the San Bernardino range on the northeast and the San Jacinto mountains on the southwest, however, bear an absolutely desert appearance. They are rocky and from a distance show no signs of vegetation except in their higher western portions.

As will be seen, the interesting difference in the environment of these three localities is reflected in the native cultures found there. It accords also with the distribution of tribes or dialectic groups. San Bernardino valley and the San Bernardino mountains were held by the Serrano. In the pass at the edge of the mountains, and at Palm Springs, lived one division of the Cahuilla. In the low-lying streamless region between Indio and Salton were another branch of the Cahuilla.

In a previous publication dealing with the geography of the Shoshoneans of California the territorial relations of the Serrano and Cahuilla in their region of contact have been discussed.[1] The published evidence on this point is conflicting, several authors having included San Bernardino valley in the former habitat of the Cahuilla. The conclusion was however arrived at that this valley was held by the Serrano, and that the westernmost limit of Cahuilla territory was somewhere in the San Gorgonio pass. The San Bernardino mountains appeared to be Serrano, the San Jacinto mountains Cahuilla. Information secured in the course of the present trip substantiates these conclusions.

The home par excellence of the Serrano was the San Bernardino range and the desert tableland extending between this and the Tehachapi range to the north. It is therefore easy to see how their name, which signifies "mountaineers," came to be applied to them. The only region in which they are known to have held any fruitful low-lying plain was in the San Bernardino valley. Redlands, San Bernardino, and Colton were all in Serrano territory. Riverside and Jurupa were near the meeting

[1] Shoshonean Dialects of California, present series, IV, 132, 1907.

point of Serrano, Gabrielino, and Luiseño. A Serrano informant made these places Luiseño, but claimed for his people all the territory north of the Jurupa mountains. Yucaipa he regarded as Serrano, but gave San Timoteo to the Cahuilla. As Yucaipa valley drains into the lower part of San Timoteo canyon, the boundary between the Serrano and Cahuilla must be sought somewhere in the course of this western approach to the wider San Gorgonio pass.

No information could be obtained regarding the Serrano extension westward in the plain, but there seems no reason to alter the conclusion previously arrived at that it was somewhere in the neighborhood of Cucamonga or the line between Los Angeles and San Bernardino counties. The topographically natural line of division would follow the hills, just west of Pomona, forming a northward extension of the Santa Ana mountains. On the other hand it must always be regarded as doubtful, in the absence of definite information, whether a people otherwise showing so strong a preference for a mountain habitat would have been likely to hold the large stretch of plain between Colton, Pomona, the Santa Ana river, and the San Gabriel mountains.

The eastward extension of the Serrano is less doubtful, at least for some distance. San Gorgonio pass about Banning was Cahuilla territory. This included the lower part of Morongo reservation, called Potrero in Spanish and Malki in Cahuilla. But immediately east, Mission creek, flowing southeastward into the desert from San Gorgonio peak, was held by the Serrano, who call it Marina or Maronga. East of Mission creek are Morongo creek and Morongo valley, the names of which are evidence of occupancy by the same people. Morongo, or some form of the name, is the term by which the Serrano of this region are known to several Indian tribes. The Serrano also lived still farther east, at Twenty-nine Palms, some distance north of the main crest of the San Bernardino range. This place, which they called Mara, is near the one hundred and sixteenth meridian, in the Mohave desert, nearly half way between Indio on the Southern Pacific railroad and Bagdad on the Santa Fe. One of the original inhabitants of this place is still said to live there, but the remainder of the few Indians now on the small reservation there

are Chemehuevi. As to the desert country still farther east, in which the territory of the Serrano comes to an end and that of the Chemehuevi begins, no information could be obtained. The languages of Highland and of Mission creek and Morongo valley were found to be identical. The dialect of Twenty-nine Palms is said to have been identical with that of Morongo, and that of Highland with the language spoken about Bear valley in the mountains to the north. It therefore appears that all the Serrano of the San Bernardino mountains spoke only one dialect, which differed somewhat from that of the Serrano of the Mohave desert and the Tehachapi mountains.

Serrano names of places are:

Wachavak	San Bernardino.
Yukaipat	Yucaipa, east of Redlands.
A''hangk	a small hill west of Colton.
Hunguvat	hills southeast of Colton, across the river, probably Box Springs mountains and the hills farther north.
Hikavanü't[2]	a large hill west of Colton, probably Jurupa mountain.
Mu'kat	mountains south or southwest of Colton, probably the Sierra Santa Ana.
Kukamonat	Cucamonga.
Wahinut	Cajon canyon.
Kwiria-kaich[3]	San Gorgonio mountain.
Kayakhpiat	Bear lake.
Achavat	a lake to the north of the last.
Atanpat	a sierra to the north.
Padjüdjüt	(warm water), the stream flowing north from Little Bear valley, the upper Mohave river.
Nanamüvyat	six large stones, "goddesses," in or near Little Bear valley.
Kotainat[4]	Santa Ana river near Highland.
Mara	Twenty-nine Palms.

[2] Or Yikavanü't.

[3] Qaitc, mountain.

[4] Qotainat.

Maronga[5]	Morongo valley or Mission Creek.
The above, except Mu'kat, are all in Serrano territory.	
Savova	San Jacinto reservation.
Luvus	place or tribe south, in vicinity of Cahuilla reservation. This does not have the appearance of a Serrano word.
Aya-kaich[5]	San Jacinto mountain.
Akavat[6]	San Timoteo and Banning, the country of the Wanupiapayum Cahuilla.
Kawishmu	a small hill east of White Water, marking the boundary between the Wanupiapayum and the desert Cahuilla.

The "Paiuches" and Chemehuevi are called Yoaka-yam, from yoaka, perhaps the term for a high mountain or range. This word was applied by a Vanyume or "Möhineyam" Serrano of Mohave river to the Chemehuevi.[7] It appears to be the Serrano term for the Ute-Chemehuevi in general. The desert Cahuilla are Kitanemun-um, those of San Gorgonio pass Wanupiapay-um. The former word resembles Gitanemuk, the name of the Serrano of Tejon. For themselves, the Serrano perhaps had no name. Kaiviat-am was obtained. This is a derivative from kai-ch (qaitc), mountain. It is not certain whether it is an old term denotive of the tribal and linguistic group or a translation of Spanish "Serrano."

As regards the Cahuilla, the tribal affiliations of the Colorado desert people have always been undoubted, whereas Gorgonio pass has been disputed territory. It has been stated that the Indians of Morongo reservation near Banning were mixed Serranos and Cahuillas. This is literally true. Nevertheless the number of true Serrano on this reservation is small. The Indians are predominatingly Cahuilla, and both tribes state that the pass in the vicinity of the reservation was always Cahuilla territory. These Banning Cahuilla however answer indiscriminately to the name of Serrano or Cahuilla, and seem to apply

[5] "The largest village" according to the Highland informant.

[6] Aqavat. The frequent -at of these names is perhaps a locative suffix.

[7] Present series, II, 140.

either name to themselves. Why they should be known as Serrano as well as Cahuilla is not quite clear. A Serrano informant questioned at Banning claimed the name Serrano as proper only to her own people. When they moved from Mission creek and Morongo valley to live on the reservation, they brought the name with them, which then came to be applied to the Cahuilla there. This explanation can of course not be accepted unqualifiedly. As compared with the Cahuilla of the desert, the Banning Cahuilla lived at a much greater altitude and at the foot of the mountains, so that they were literally "Serranos." It is only natural that the distinction between the general meaning of the word, and its exact signification as applied to a tribal or linguistic group, should not always have been observed by Spanish and English-speaking people. Moreover the confusion may have been aided by the distinction existing in the Indians' mind between the Cahuilla of the Colorado desert and those of San Gorgonio pass. As stated, the Serrano call the former Kitanemunum and the latter Wanupiapay-um. Among the Cahuilla themselves corresponding names were not obtained, but it is obvious from their reference to one another that the distinction between the two groups exists. Besides the difference in mode of life enforced in former times by environment, there remains today a difference in dialect.

The Cahuilla of Palm Springs or Agua Caliente form part of the San Gorgonio pass group. San Jacinto mountain is said to have belonged to these Indians. Palm Springs is less than eight miles in a direct line from the summit of this peak.

Nothing new was ascertained as to the territory of the desert Cahuilla. They live in a number of reservations in the flat valley, near its center or towards its western side. These sites appear to have been among their principal habitations in aboriginal times. It is doubtful whether they claimed definite limits to the more barren outlying portions of their territory. To the north there seems every reason for assuming that the limit, if any existed, was the crest of the San Bernardino range, which is here of no great altitude. To the southeast they extended at least to the northern end of the Salton sink. Near the southern end of this ancient lake there were formerly Yuman villages.

The Cahuilla living in the mountains to the west of their brethren in the desert, were situated in a third environment, different both from that of the San Gorgonio pass and of the desert. They are principally on Cahuilla reservation in the drainage of the Santa Margarita river, and at Santa Rosa and San Ignacio in the lost drainage of Coyote valley. This habitat is on the more favored side of the San Jacinto range. The desert Indians state that the dialect of the mountain Cahuilla is identical with their own.[7a]

Twenty-nine Palms in the Mohave desert north of Indio, formerly in Serrano territory, is now held chiefly by Chemehuevi. Within the past few years several families of these Chemehuevi have removed from Twenty-nine Palms on account of the difficulty of finding subsistence there, and are now on the Cahuilla reservation of Cabezon, near Coachella, three miles southeast of Indio. The Cahuilla cannot communicate with them except in English or Spanish, though the two languages belong to the same family. The Cahuilla state that these Indians did not formerly live at Twenty-nine Palms, but to the east near the Mohave, and that when they fought that tribe many years ago, they were defeated and fled to this place. This statement corresponds with a quotation made by Dr. Barrows from an Indian Office report, according to which a number of Chemehuevi had in 1867 fled from their enemies, the Mohave, across the desert into Cahuilla territory. Mohave accounts also tell of their war about this time with the tribe with which they had previously maintained friendly relations. For the sake of corroboration the few Chemehuevi at Cabezon were questioned as to their places of birth. All the younger people to about the age of forty were born in Twenty-nine Palms, while all the old people are from the vicinity of what they call the Mohave river, that is the Colorado, the river of the Mohaves. One elderly man was born near Pahrump, in southern Nevada. Their dialect was found to be the same as that of the Chemehuevi questioned some years ago.

The presence of these Chemehuevi at Twenty-nine Palms and

[7a] Cahuilla Indians from Cahuilla reservation, seen at the Indian conference in Riverside, April, 1908, stated that there were slight differences between their speech and that of the desert Cahuilla.

Cabezon is interesting because it adds another distinct tribe and language to the many included under the jurisdiction of the Mission-Tule agency. Besides a few Chumash surviving near Santa Ynez in Santa Barbara county, and the Yokuts at Tule river, among whom three dialects are spoken and among whom a number of Tübatulabal or Kern river Shoshoneans are intermarried, there are the following groups known as Mission Indians: of the Yuman family, the Diegueño, speaking probably two closely similar dialects; of the Shoshonean family, the Serrano at San Manuel and Banning; a few surviving Gabrielino at the former and perhaps other reservations; the Cahuilla that have been enumerated, speaking two slightly different dialects and living in three quite distinct districts; the Luiseño, whose language is also slightly varied between San Luis Rey and San Jacinto rivers; the Agua Caliente or Warner's Ranch Indians; the San Juan Capistrano Indians, of whom a few survive; and finally the Chemehuevi just mentioned. These Shoshoneans belong to five of the eight principal divisions into which the entire sub-family is divisible. The total number of linguistic families under the Mission-Tule agency is thus four, of languages eight, and of dialects fifteen or more.

Among the San Manuel Serrano was found Jose Sevaldeo, the same informant who had been questioned some years previously, though his name was then understood to be Varoxo. He is now a very old man of perhaps ninety years, who was grown up but not yet married at the time that "the stars fell from the sky" in 1833, and whose skin is turning white. Owing to his extreme age and feebleness exact information could no longer be obtained from him. He gave the Indian names of a number of localities. As to some of these there seems no reasonable doubt. As regards others, the form of the name is in some cases Gabrielino, in others Serrano or possibly Luiseño; and in certain cases the localities to which the names are said to refer appear to be incorrectly given.

Pimu	Santa Catalina island.
Kingki	(evidently San Clemente island.)
Chauvi	in vicinity of San Pedro (Reid, Chowi-gna, Palos Verdes).

Ungövi-pit	Salinas, *i.e.*, Redondo, previously given as Ongoving.[8]
Wenot	Los Angeles.[9]
Wach-bit	San Bernardino.
Yukaipa	Yucaipa.
Ashuksha-vit	given as La Puente, but evidently Azuza, Reid's Asuksa-gna.
Shua-vit	given as a place on the coast near Palos Verdes or Cerritos: evidently Reid's Sua-ngna, Suanga.
Akura-nga	San Gabriel; Akura-gna is given by Reid[10] for La Presa, and San Gabriel is Siba-gna.
Apachia-ng	a small lake near San Gabriel.
Kukamo-nga	Cucamonga; Reid,[10] Kukomo-gna.
Pashina-nga	Chino; Reid Pasino-gna.
Khurupa	Jurupa.
Toibi	San Jose; Reid Toibi-pet.
Sovovo	San Jacinto.

CULTURE.

As has already been intimated, the strong differences between the environments of the various divisions of the Cahuilla and other Mission Indians of Southern California are reflected in considerable differences of culture. At the same time there is an underlying general uniformity of civilization. This is clear from the fact that in all matters not under the direct influence of physical environment, such as social and religious life, the differences between the tribes and dialectic groups are very much smaller. As might be expected in a case where the diversifying influence is physical nature, the cultural differences are more marked on the material than on the immaterial side of native life. The implements of the Cahuilla, as they would

[8] Present series, II, 143. Salt is añor in Gabrielino, eñla in Luiseño. The locative ending -bit or -pit is Serrano.

[9] "Because of a large river there." Cahuilla wanic, Serrano wanut-, stream.

[10] As cited, transcribed, in the present series, II, 142.

be represented in a museum collection, are therefore particularly favorable for illustrating such cultural differences as exist. But even among these there are entire classes of objects which for some reason or other are not dependent upon variations of physical environment within the comparatively narrow limits of Southern California, and are therefore practically identical throughout the region. Preeminent among such objects is basketry. Food and mode of subsistence were of course most directly dependent on environment, and the implements for their gathering and preparation varied accordingly. Thus the Cahuilla of the desert use chiefly a deep wooden mortar with a long pestle. The people at San Gorgonio pass have shallow mortars with basketry rims. The southern Luiseño and Diegueño use stone mortars without the basketry rim but of greater depth. Pottery is perhaps the class of objects in regard to which there is greatest tribal divergence that cannot be connected with natural surroundings. Pottery was made by all the Luiseño-Cahuilla as well as by the Yuman Diegueño farther south; it was not made by the Gabrielino; while the position of the Serrano is doubtful.

As one comes among the Cahuilla of the desert after some acquaintance with such tribes on the coast side of the San Jacinto range as the Luiseño, and with the agricultural Yuman tribes on the Colorado,—in other words, the western and the eastern neighbors of the Cahuilla,—one cannot but be struck by the numerous similarities which they present to the latter, of whom the Mohave may be taken as typical. In both cases there is a similar habitat, a wide semi-desert plain, with mountains in the distance. There are houses of similar brush, more or less covered with sand. The pottery is identical in material and shape and even in ornamentation. Among both tribes the staple food furnished by nature is mesquite, which is pounded in similar mortars with stone pestles. The mesquite is stored in the same large rudely constructed granary baskets. Grain and seeds are ground on the nearly flat metate. The whole appearance of a desert Cahuilla house and its contents at the present day are very similar to that of a Mohave house.

But here also we are dealing only with a partial impression.

After all the differences between the Cahuilla and the Mohave or Yuma are greater than the correspondences. The Mohave are farmers and fishermen. The Cahuilla follow neither pursuit. The Mohave are practically without basketry, except for such few pieces as they may trade from their Shoshonean neighbors. The Cahuilla use baskets as abundantly as all their Shoshonean kinsmen. The Mohave employed a carrying frame of sticks and twine, the Cahuilla a carrying net which held a basket. The Mohave were warlike and had a developed tribal sense. The Cahuilla resembled the other Indians of California in lacking these qualities. They appear also to have been without the totemic clan system of the Mohave. What is known of their ceremonies, and of the character of the shaman among them, further points to practically complete identity with the other Mission Indians. In other words, they are typical Mission Indians, somewhat specialized by their desert habitat, and possibly influenced in some respects by contact with the Yuman tribes of the Colorado.

BASKETRY.

The basketry of the Mission Indians is well known, and that of the Cahuilla has been described in detail.[11] Considering its importance in the life of the people, it is remarkable for the small number of weaves, forms, and materials to which it is confined. The ordinary materials are not more than three: a grass, *Epicampes rigens,* for the warp; and for the woof either a reed-grass, *Juncus robustus* (or *lesenerii*), or sumac, *Rhus trilobata.* The fibre of the palm, *Neowashingtonia filamentosa,* is also sometimes employed today, but its former use is doubtful. There appears to have been only one dye in common use, a black which is produced either from the elder or from a species of *Sueda.* Yellow, red, brown, and even greenish shades are ordinarily all obtained by using different portions of the stem of the *Juncus,* which between its root and top passes through several quite different colors. All the ordinary forms of basketry

[11] Barrows, Ethno-botany of the Coahuilla Indians of Southern California, 1900, 40; Schumacher, in Putnam, Wheeler Survey, VII, 247.

are coiled on a multiple foundation of the *Epicampes* grass. *Juncus* is occasionally substituted.

Twined weaves are used only in rude openwork baskets, so far as known. The Chemehuevi make conical carrying baskets (Pl. 1) and caps, in the diagonal-twined or double-warp weave so characteristic of the Shoshoneans of the Plateau. A basket made in this way may occasionally be found in the possession of the Cahuilla; but they appear not to have practiced the weave themselves.

The Cahuilla openwork baskets (Pl. 1) may appropriately be described as irregular in technique, rather than as strictly in the simple single-warp twined weave. The simplest form of twining predominates, but in all specimens examined is more or less interspersed with double-warp twining and twining on zigzagging warp. Two warp strands are frequently treated for awhile as a unit; then they may diverge and each be twined around independently; or, one may be bent to the side, be wound with the adjacent warp rod for a course or two, and then return to its former neighbor. Sometimes this alternate zig-zag warp twining is carried out fairly regularly over a considerable part of the basket, but this is unusual. The principal attempt seems to be to get the interstices in the basket about equally far part, and to accomplish this end warp stems are united, separated, and reunited at will. Hence the invariably ragged and rough appearance of these baskets.

Coiled weaving on a definite three-rod foundation of woody stems, and similar coiling on single rods,—the two most important coiled weaves of northern California,—are not used at all by the Cahuilla or other Mission Indians.

Large granaries for storing mesquite are a conspicuous feature of the surroundings of a desert Cahuilla settlement. (Pl. 2.) They are from three to six feet across, without top or bottom, placed on a layer of brush, and covered with the same. They are sometimes set on the ground, but more usually raised on a rude scaffold of poles. These granaries can be called baskets only by courtesy, as they show no distinct weave, slender branches being simply intertwined as in a bird's nest. The material used in them, given by Dr. Barrows as *Artemisia ludovi-*

ciana, is similar to the plant used by the Mohave, *Pluchea sericea,* commonly called arrow-weed. Many Mohave and Cahuilla granaries are identical; but when a number of each have been seen, it becomes apparent that the Cahuilla show more tendency to make baskets of smaller diameter and relatively greater height narrowing toward the top. The more frequent Mohave form has the shape of a cylinder, perhaps twice as great in diameter as altitude. Like the desert Cahuilla, the Mohave set their granaries on a layer of brush on the ground, or on a scaffold. The granaries of the mountain Cahuilla, says Dr. Barrows, are usually on tall bare rocks.

The basket mortar, or rather hopper of the stone mortar, is still used in many households among the San Gorgonio pass Cahuilla, but no specimens were seen in the desert. Stone mortars are rare in the desert, and it is not certain that they were used with the basketry rim. The Banning Cahuilla say that they attach the basketry rim to the stone with gum from a bush. Asphalt is however the most common material, as numerous remains from Southern California attest. The mortar basket calls for no particular description, being identical with a common form of Cahuilla basket except for lacking a bottom. Believing that it might be possible that these baskets were made from such complete baskets by cutting out the center, the Indians were questioned, but stated that this was not the case, the mortar baskes being begun around a hoop. This is obviously the easier as well as the quicker method of manufacture in coiled basketry. Among the Yurok of Northwestern California, whose mortar baskets are twined, the basket is begun as if it were to have a rude bottom, and only when ready for use is the central portion cut out.

The basketry cap of the Cahuilla (Pl. 7), is like that of the other Mission Indians, and of a type extending at least as far north as the Yokuts of central California. It is rather large, flat-topped, and of coiled weave. Its general appearance is that of the frustum of a cone, horizontally corrugated. It is not worn habitually, as are the basketry caps of northernmost California and Oregon, but only in carrying burdens. The load is contained in the carrying net, the strap of which passes over the forehead.

It is as a protection against this band that the cap is worn. The caps are made perfectly round, so that they do not fit the head well. Only one specimen in the Museum collections has been flattened, apparently by use, to the oval shape of the head. Most of the caps seem unnecessarily large for the head. The pattern ornamentation is simple, and sometimes wanting. One or two of those obtained show signs of having been used for other purposes, such as parching or holding liquids.[12]

The Chemehuevi cap is of a different type, being twined instead of coiled, somewhat peaked or conical instead of flat-topped, and lighter and more flexible than the thick coiled Cahuilla cap. One of these Chemehuevi hats, which the owner was unable to part with, was ornamented with a red and black design resembling a basketry pattern, but painted on. A similar cap, also in diagonal-twined weave, was obtained from a Cahuilla family at Alamo. (Pl. 7, on right.) This piece, however, had the design worked into the basketry. This Chemehuevi form of cap is of the type found among the Shoshonean tribes of the Great Basin, and the piece here mentioned could be practically duplicated by Ute specimens.

While the basketry cap is characteristic of many parts of California, it is not found over the whole state. In the region in northernmost California in which twined basketry is exclusively used, caps are habitually worn by the women, whether carrying loads or otherwise engaged, and are apt to be the most highly ornamented and carefully made articles of basketry. In the northeastern corner of the state, as among the Modoc, they have the shape of a truncated cone. In northwestern California, among the Yurok and Hupa, they are lower and somewhat rounded, but all the better made ones are flat-topped. South of this belt across northernmost California, beginning with the region in which coiled basketry first appears, and extending to beyond the latitude of San Francisco, basketry caps are not made. The Pomo, Wintun, and Maidu[13] of the coast and Sacra-

[12] Barrows, p. 44.

[13] Professor Dixon, Bull. Am. Mus. Nat. Hist. XVII, 162, 1905, states that the northern Maidu women formerly wore basket hats; but no specimens have been seen by him or by the author and none appear ever to have been collected.

mento valley, and the Miwok and probably other tribes, do not use caps. With the Yokuts of the southern San Joaquin valley, and among the neighboring Shoshoneans such as the Mono, the Tübatulabal, and those of Inyo county, is found the large flat-topped coiled cap worn only to protect the head in carrying, and this form continues to be met with southward over most the remainder of the state. The peaked diagonal-twined Shoshonean cap characteristic of the Great Basin, is distinct from both the northern and southern of the California forms, and occurs only in the easternmost parts of the state.

A twined water-basket of jug shape, coated with pitch or asphalt, of the type used by the Paiutes and other Shoshoneans, and on Santa Barbara Channel, is said to have been made by the Cahuilla in former times.[14] Such water-baskets have entirely disappeared. In fact there seems some reason to doubt their ever having been made by the Cahuilla, who had pottery which was fully as suitable and much more readily manufactured.

A leaching basket is mentioned by Dr. Barrows, but none was seen, and no definite description could be obtained. Possibly the twined openwork baskets of juncus answered this purpose.

The seed-beater (Pl. 3) may appropriately be included under the consideration of forms of basketry, although the Cahuilla seed-beater, which is nothing but a frame of a few sticks, presents but little appearance of basket work. The specimens obtained have the sticks wound together with strips of cloth. Either strips of bark or string might have been employed for this purpose in former days. In size and shape the Cahuilla seed-beaters resemble those used elsewhere in California, but they are made of an unusually small number of sticks and are peculiar in the parallel arrangement of these along the middle of the encircling hoop. The seed-beater of most California tribes is made in circular openwork twining on radiating ribs.

All the foregoing forms of basketry serve some special or limited purpose, and, as has been said, to several of them the term basketry can be applied by courtesy rather than in fact. If all these special forms are excluded, and consideration is given

[14] Barrows, 41: called kaputil. The stem of this word appears, with the diminutive suffix -mal, in kaput-mal, obtained as the name of ordinary bowl-shaped baskets, as given below.

to the ordinary types of basketry serving a wider and more general function, it is apparent that the Cahuilla show a limitation in the number and variability of forms that is as striking as is the confinement of materials to three or four plants. In brief, the types of the ordinary baskets of the Cahuilla and other Mission Indians are only four. These may be described as the flat basket, the shallow basket, the large deep basket, and the small globular basket. These are all executed in the same materials, weave, and fineness of technique, with similar patterns. The constricted or bottle-necked basket of the San Joaquin valley, the oval basket found here and there among many tribes, the feather or bead-ornamented basket of the Pomo, the conical carrying basket of California in general, are all absent. That certain of these forms, such as the oval basket, are found at the present day, seems to be due to the stimulus of basket buying by the whites, as no oval baskets have been seen in use among the Indians. The uniformity in size of each of the four classes of baskets that have been enumerated is also quite striking. The smallest pieces have half or more the diameter of the largest specimens of the same class. Among other California tribes baskets of the same shape range from a few inches to nearly as many feet.

The flat basket, or chipatmal (Pl. 4), is most commonly something over a foot in diameter. Its curvature is very slight. It is employed as a plate or tray, and for winnowing, and has also been described as used to gather the seeds struck down on it by the seed-beater.

The shallow basket (Pl. 5) is deeper than the preceding, but flatter than the large deep basket. It is called sewhalal, according to Dr. Barrows; or kaputmal, the same as the deep basket. It has about the same diameter as the flat basket, is some three or four to six or eight inches deep, and has the form of a shallow flaring bowl. The bottom is nearly flat. The sides usually rise in a gradually ascending curve, or more rarely meet the bottom at a distinct angle. The uses of this form of basket naturally shade into those of the flat basket. It is a convenient receptacle for food. It is also used for parching corn or seeds. A specimen may occasionally be found of which the interior is entirely charred.

The deep basket (Pl. 6) is much like the shallow one except that its sides rise more steeply and to a greater height. Its usual shape is that of an inverted truncated cone, of which the altitude is equal to the smaller diameter and about half that of the greater diameter. Besides being used to hold food and other articles, this flat-bottomed coiled basket is the substitute of the Cahuilla and Mission Indians for the pointed twined carrying-basket found elsewhere in California. It is not so shaped that it can be properly carried on the back merely by means of a strap passing around it and over the forehead. With the Cahuilla form of basket this strap becomes part of a net, in which the basket rests. In reality it is this net and not the basket that is the burden-carrier: the basket is only a secondary receptacle for objects that the meshes of the net will not retain.

The carrying net is not confined to Southern California, but it is only there that the shape of the burden basket makes it a practical necessity. In central California the net is rather a convenience, and the basket is often used without it.

The small globular basket (Pl. 7) is the least common of the four types. It serves to keep small utensils and trinkets. The diameter is usually somewhat greater than the height. The mouth is of the same size as the bottom, or sometimes smaller. No attempt is made to form a neck or constriction that will produce a lip, or an urn-shaped vessel. Occasionally one of these small globular baskets is found with a thong across its mouth by which it can be suspended. All baskets of this type that have been seen are ornamented; but the design is like that of other shapes, except in more frequently presenting a vertical arrangement instead of a disposition of the pattern in a horizontal band.

All the Cahuilla basketry that is made for use is coarsely constructed. The wrapping of the woof is never close, and at times is very far apart. The baskets are not intended to hold water, and it runs through them readily. Upon being thoroughly wetted they are probably more nearly water-tight, but it is apparent that the use of pottery renders attention to this quality unnecessary. The same coarseness which characterizes the woof extends also to the warp. While the warp material is the same as that used by the southern San Joaquin valley tribes,

the coils are much thicker. This is equally true of the four principal types of baskets and of the caps. Of over fifty pieces of basketry in the Museum collection the finest has only six coils or courses to the inch, the coarsest four. This uniformity is remarkable in being maintained in all classes and sizes of baskets. In baskets made for sale, where attention is given to appearance, finer work is occasionally found. Especially the woof wrapping is brought more closely together, giving the impression of neatness and good work which is so characteristic of most California basketry, although wanting from the typical Cahuilla work. The size of the warp foundation is less often reduced, but occasionally a particularly well made basket is offered for sale, in which the coil is no thicker than in an ordinary good Yokuts basket.

In regard to designs a great difference exists between baskets made by the Cahuilla for their own use, and those made for sale to the whites. The latter are most always made of stems of juncus of varying shades, presenting a mottled appearance. This effect is pleasing, and such baskets bring the readiest sale. In baskets made by the Cahuilla for their own use, this mottling is much less pronounced, and the shade of the juncus used is much lighter, being whitish rather than olive green over the body of the basket. To bring out definite patterns, as distinct from the more or less mottled surface of the basket as a whole, the Cahuilla use the yellow, red, and brown shades of this juncus as well as its black-dyed form. In baskets made for use the pattern is almost always quite simple. In those made for sale it is in most cases quite elaborate. Figures of men, lizards, snakes, birds, and animals are frequently woven in such baskets, and still more frequent are diversified, branching, or otherwise elaborate figures of non-realistic import. In their own baskets the Cahuilla rarely put more than one or two simple bands or radiating figures. The simple stripe; the short bar, vertical or horizontal; the rectangle, either standing alone as a bar or combined into a series of steps; triangles, usually in series; the diamond or hexagon repeated into a horizontal band; and the simple zigzag, constitute the great majority of patterns. A striking but uncommon design is the fret. (Pl. 6.) Occasionally a design is in two colors, most often black combined with reddish or brownish yellow. At other times the two colors occur on different parts of the same basket.

The prevailing arrangement of the pattern in typical Cahuilla baskets made for their own use is a horizontal one, in most cases a continuous band encircling the basket. Even where a diagonal, vertical, or zigzag pattern arrangement occurs in flat or shallow baskets, it usually produces the effect of forming a band, which in baskets of this shape is the equivalent of a horizontal arrangement. In deep baskets there is scarcely an exception to the prevalence of the horizontal band, and in caps it is also usual. Only in the small globular basket is the horizontal arrangement lacking. There seems to be a desire to have the pattern on such baskets extend from top to bottom. Consequently vertical designs are most common on them, and zigzag arrangements of next greatest frequency.

In the prevalence of horizontal patterns, especially of the band type, with a secondary tendency towards vertical designs, the Cahuilla agree with the other Mission Indians, and in fact with the tribes of all that part of California south of the latitude of San Francisco.[15]

The small globular baskets are exceptional in another respect than their pattern arrangement. In all flat, shallow, and deep baskets, as well as in caps and mortar baskets, the direction of the coil, as one looks into the basket, is from left to right, or clock-wise; in all globular baskets it is from right to left. A somewhat similar difference has been noticed by Dr. Dixon among the Maidu,[16] except that among these Indians flat baskets run from right to left. Mr. S. A. Barrett has noted that among the Pomo the coil is always clockwise, whatever the shape of the basket. These striking differences, which evidently are typical of tribes, and the reason for which is unknown, have led to an examination of all the coiled basketry from California in the University Museum, with the following results. In all cases, whether the basket is used with bottom down or with bottom up, and whether the pattern is on the inside or on the outside, the direction of the coil is observed as the hollow of the basket is looked into.

The coiled baskets of the Wailaki and of the Yuki all run

[15] Present series, II, 150, 1905.

[16] The Northern Maidu, Bull. Am. Mus. Nat. Hist., XVII, 146, 1905.

anti-clockwise. Those of the Pomo run clockwise. Among the Maidu the direction is clockwise, except that flat baskets run anti-clockwise. Among the Miwok, where a large series of baskets was examined, the same arrangement was found as among the Maidu. Among the Washo, the baskets examined, which were all bowl-shaped, showed a clockwise coil. Among the Yokuts the coil in flat baskets is clockwise; in the so-called "bottle necks," forms showing a distinct shoulder and constricted neck, always anti-clockwise; and in bowl-shaped baskets, variable, though in the majority of cases clockwise. Among the Mono and other Shoshoneans of central California the direction is clockwise, except again in the case of bottle-necks. Among the Mission Indians, Luiseño and Diegueño as well as Cahuilla, the direction is clockwise except in the small globular baskets. Among the Chemehuevi flat and bowl-shaped baskets usually run clockwise, though a number of exceptions have been observed. The Chemehuevi also make urn-shaped baskets approximating bottle-necks, but the direction of the coil in these is not known.[16a]

It thus appears that other than among the Wailaki and Yuki the normal direction of the coil in California basketry is clockwise, except that in three groups of tribes certain classes of baskets, and those only, also run anti-clockwise. Among the Maidu and Miwok it is the flat baskets that are exceptional, among the Yokuts and Mono the bottle-necks, among the Mission Indians the globular baskets. The differences in shape between the baskets that are thus made an exception of, render it difficult to conceive a technological reason for the turning of the coil in the unusual direction. It can be imagined that it might be easier to make a basket with constricted mouth by working in one way than in the other, and that the Maidu and Miwok choice of the unusual direction for their flat baskets was due to their holding such baskets inverted during the process of manufacture; but

[16a] Since this paper was put in type, Dr. C. V. Hartman, Curator of Ethnology and Archaeology in the Carnegie Museum, Pittsburg, writes as follows regarding a collection of Chemehuevi baskets in that museum: "Of the flat baskets, ten have the coils clockwise, ten anti-clockwise. Of the more or less cylindrical baskets, five have the coils clockwise, fifteen anti-clockwise. Mr. C. P. Wilcomb has verified the observation." It thus appears that the Chemehuevi follow no consistent rule, but that the prevailing tendencies among them are the same as the rule of the Yokuts and Mono.

such guesses are in greater need of verification by observation than of further discussion. It is not unlikely that the selection which governs the direction of the coil among different tribes is dependent primarily on custom or tribal habit.

The prevailing clockwise tendency in California seems to be replaced by the opposite one elsewhere in North America. In the great majority of Southwestern baskets the coil is anti-clockwise. This is true of all the ancient baskets examined and of most of those made by Indians of the present day. Among the tribes of Washington and the Alaskan Eskimo the anti-clockwise direction also prevails.

STONE IMPLEMENTS.

Of next greatest abundance after basketry, among the Indians of the present day, are articles of stone, especially the metate and the mortar, and the corresponding mano or muller and pestle. These are still in frequent use. The metate is nothing but a flat stone, oval or somewhat rectangular in shape. It is made of granitic or metamorphic rock, not of a sandstone slab. It is very slightly hollowed. Some pieces show hollowing only in that part of their area which is actually rubbed in use. Occasionally a large lava metate on three legs, of the familiar Mexican type, is seen. These are always declared to have been obtained from Mexicans. A considerable number of such pieces must have been brought into California from Mexico. One has been obtained among the Yokuts north of Fresno river, and a fragment from the Emeryville Shellmound near Berkeley is in the University collections. It is curious that these heavy implements of the stone age should have been brought over a thousand miles by a civilized people in colonizing a new territory.

The rubber or mull stone is of much more varied shape than the metate. Sometimes it is oval in outline, thin and flat. Other pieces of the same length are narrower and twice as thick. Still others are much longer, of equal breadth and thickness, and well squared, so that they present the shape of a short length of dressed timber. Still others are natural shaped stones or boulders, the bottom of which has been rubbed flat.

The mortar shows more variations than the metate. The deep wooden mortar of the desert, and the stone mortar with basketry rim of San Gorgonio pass, have been mentioned. The wooden mortar is specially adapted for the mesquite bean. It is made from a section of tree two feet or more long. The greater part of this log is sunk in the ground. The projecting portion presents the appearance of being a stump cut from a tree in situ. The mortar hole is quite deep, in some cases as much as a foot or more. A correspondingly long pestle is necessitated. This is about two feet in length, fairly well shaped, and quite slender. A similar wooden mesquite mortar is used by the Mohave, though block, cavity, and pestle are shorter than among the Cahuilla.

The stone mortar with basketry rim (Pl. 15) is used in the region where mesquite is unimportant or wanting. The block or boulder of stone is large compared with the size of the rather shallow cavity. The pestle used with this mortar (Pl. 8, left) is naturally much shorter than the pestle accompanying the deep mortar of the desert (Pl. 8, right). It is also much more rudely shaped. In most cases it appears to be only a convenient cobble or boulder, one end of which has been dressed to fit the surface of the mortar cavity.

This rude type of pestle, practically unshaped except at the pounding end, or sometimes flattened on one side, is found also in the Sierra Nevada and perhaps in other parts of the state. Among the Yokuts and Miwok this is the only form of pestle for ordinary purposes. Cylindrically shaped pestles occur only in small sizes, for use with small portable stone mortars for crushing tobacco, medicine, or meat. Associated with the rough pestle among the Yokuts and Miwok, is the bedrock mortar, consisting of a hole in an exposed surface of granite. Most frequently a number of these holes, varying in depth, are found close together. Such assemblages, which have been a number of times described and illustrated,[17] are a conspicuous feature of past and present native life in the Sierra region. The basket mortar is unknown among these tribes, but is used by all the

[17] Holmes, Anthropological Studies in California, Rep. U. S. Nat. Mus. for 1900, 178, pl. 29, and Handbook of American Indians, Bull. 30 Bur. Am. Ethn., I, 944.

Indians of the Coast Range north of San Francisco—both those of the Central type of culture, such as the Pomo, and those of northwestern California. The basket mortar is used also in the northeastern part of the state. It is also found in the Chumash or Santa Barbara region, both mainland and island, as is evidenced by numerous stone mortars and slabs showing remains of asphalt at the rim and by an occasional piece preserved with the basketry still attached. In this region, however, the bowl-shaped mortar without basketry rim appears to have been used side by side with the composite form, for many of the mortars found are of such irregular shape at the top that a basket could never have been fastened to them. The basket set on a slab or shallow mortar, and the bedrock mortar, divide almost the whole of California between them, at least as regards the Indians of historic times and the present. This fact brings up the question of the origin and purpose of the portable stone mortars which are found in all sizes, in and on the ground, in all parts of the state. The Indians not only do not use these, but on being questioned frequently declare that they would not know how to, as the manipulations required in pounding acorns or seeds in these mortars would be quite different from those employed in the basket-rim or bedrock mortar. It can only be concluded that the ordinary bowl-shaped mortar found in such abundance all over California, belongs to a former period, and has in recent generations or centuries been generally replaced by the other forms described. The only region in California where the author has seen round or somewhat deep stone mortars in use is in San Diego county, where they are occasionally met with among the half-civilized Luiseño and Diegueño.

Next to the metate and muller, and mortar and pestle, the stone implement today most frequently encountered among the Cahuilla, though it is but little used, is the arrow-straightener. This consists of a rectangular or oval block of stone somewhat raised toward the middle, where a transverse groove divides its upper surface. It is in this groove that the arrow is placed to be straightened. The inner surface of the groove often shows high polish. Some arrow-straighteners show a low longitudinal ridge extending at right angles from one or both sides of the

groove. According to the explanation obtained from an old man who still used his straighteners, this ridge serves to bend cane arrows at their joints, the joint being placed directly upon the ridge after the stone has been heated. Other stones show this longitudinal ridge only in rudimentary form, so low that it is doubtful whether it could have served any actual use. In still other pieces the ridge has entirely disappeared except for two narrow grooves or scratches that mark its place and can have had little other purpose than ornamentation or the following of custom. Occasionally also other scratched designs appear in the place of the ridge. The stone from which the arrow straightener is made is soft, usually soapstone or micaceous rock. Granite or similar stone does not appear to be used. The Cahuilla form of arrow-straightener is found among the other Mission Indians and among the Yokuts of central California. Like the rude pestle, the technique of basketry, and the carrying net with its companion the cap, it is therefore another link in the chain of technological similarities of culture between the San Joaquin valley and Southern California.

POTTERY.

Of next greatest frequency after basketry and stone implements among the Cahuilla of today, are objects of pottery, though they are seldom if ever manufactured now. Native pottery is of interest in California because until a few years ago it was believed not to occur. Its distribution is restricted. It is of greatest importance among the Yuman tribes living on the Colorado, who are without basketry of their own. It is made also by the Diegueño and by the interrelated Luiseño, Agua Caliente, and Cahuilla Indians. The Gabrielino and the tribes beyond, such as the Chumash, did not make pottery. No undoubted pieces have been found in the numerous archaeological explorations of the Santa Barbara islands. Whether the Serrano had pottery, and if so which of their divisions, is unknown. It was made to some extent by the Chemehuevi and probably other closely related Paiute tribes in the part of California bordering on the Mohave habitat and on southernmost Nevada. As compared with the pottery-making Mohave, these Paiute-Chemehuevi tribes

are basket makers; but under Mohave influence they seem also to have practiced the manufacture of pottery somewhat. Several vessels obtained from the Chemehuevi at Twenty-nine Palms and Cabezon are in the University collections. North of Tehachapi pottery has been found in only one region, the southern Sierra Nevada, where both Yokuts and Mono made it to some extent. This pottery is small, dark gray or brownish, unpainted and unornamented, and quite rude. Whether the art is a recently acquired one among these Indians is not known. No archaeological investigations that might throw evidence on the question have been carried on in this mountain region, nor does the nature of the country offer any great temptations for so doing. This Yokuts and Mono pottery is quite different from that of Southern California in appearance and shapes. It appears to be used for little but cooking. The Yokuts and Mono seem to have lacked the ability of constructing large well-made vessels such as are found in Southern California, or not to have felt the need of making them. Whether the principal pottery-making area in the southern part of the state was connected with the subsidiary one in the Sierra Nevada by an intervening area in which pottery was used, is doubtful. If there was such a territorial connection, it must have been by tribes of Ute-Chemehuevi affiliation or of Serrano affinity.

All the pottery of Southern California is of one type. It is a light, thin, rather brittle red ware. On the Colorado river it is almost always ornamented, among the basket making tribes more often unornamented. The painting is in only one color, a red somewhat darker than the surface. Among the Mohave this color is produced by painting the unfired pot with yellow ochre, which burns red. Among the Cahuilla a red stone, apparently an oxide of iron, was said to be used for the same purpose.

Only three ornamented pieces of pottery were seen among the Cahuilla. One of these was a broken discarded dish, another a jar in the possession of the Chemehuevi at Cabezon, and the third, a black-painted jar which will be described below. The designs on the two red-painted pieces are identical with typical Mohave painting. Mohave pottery designs consist most frequently of patterns of parallel lines, either straight, zigzag, or

forking; of rhombi or crossed or branching lines with or without adjacent dots; and of angles and triangles with the corners filled in. Realistic drawings, round lines, or separate geometrical figures of any elaborateness, are not attempted. There is very little resemblance to any past or present pottery of the Pueblo region.

The black-painted jar from San Gorgonio pass (Pl. 10) is unique not only in the color of its ornamentation, but in its pattern, which differs thoroughly from designs of the Mohave type. It is more finely executed with narrow lines, the ornamental handling of which is reminiscent of the ancient Pueblo style. The star shape of the pattern suggests the basket ornamentation of the Cahuilla.

Like the pottery of the Mohave, that of the Cahuilla was made by coiling together narrow cylinders or ropes of clay, which were then patted between a smooth rounded stone and a wooden paddle. The degree to which the art is now in abeyance may be judged from the fact that neither of these implements was seen. As Dr. Barrows has noticed, the vessel is not kept away from the fire in burning, so that it is often blackened in spots. The same is true of Mohave and Luiseño pottery. In recent times the Cahuilla have used dung for firing their pottery. Before the introduction of domestic animals they employed the wood of certain shrubs. Among the Mohave the making and baking of pottery, which takes place before an open wood fire, may still be seen.

There are four principal forms of Cahuilla pottery: a small-mouthed jar for water and perhaps for the storage of seeds; a somewhat wider-mouthed jar; a cooking pot, of which the mouth is approximately of the same diameter as the body of the vessel; and an open bowl or dish of perhaps half as great a depth as diameter. (Pl. 9, upper figures and lower left.) These forms are made with comparatively little variation except in size, and are identical with Mohave types, even to the binding of the bowl or dish with a strip of mesquite fibre just below the rim to insure greater strength. The only divergent forms that have been seen are a vessel with incurved mouth (Pl. 9, lower right), thus being intermediate in form between the open dish and the jar; and one or two small roughly-made dishes of a dull dark red

color with a flat bottom. Of these one was obtained at Banning, the other from one of the Indio reservations. It is not certain that either of these two forms represents anything more than a sporadic aberrance.

To judge from a smaller number of specimens that have been seen, the pottery of the Luiseño and Diegueño is identical with that of the Cahuilla. While the forms of vessels made by all these Mission tribes are found also among the Mohave, the Mohave manufacture other types which do not occur among the Mission Indians, at least at the present day. Such are an asymmetrical small-mouthed jar having the shape of a swimming duck and called "duck jar;" a pottery spoon; and flat round or oval dishes nearly as shallow as one of our plates, though of a gently flaring curvature.

As compared with the practical identity of the Colorado river and the Mission region pottery in all other respects, the almost regular absence of painting from the Mission ware, and its customary presence on Mohave vessels, is of special significance. It is another instance of the want of the symbolic and pictorial tendency that is so strangely undeveloped among all California Indians.

As pottery is more important to the Yuman tribes of the Colorado river than to the Cahuilla and coast Indians, and as these latter are basket makers, it may be presumed that its use was earlier among the former, as their closer proximity to the Southwestern culture-area would also render probable.

IMPLEMENTS OF WOOD AND FIBRE.

A bow and two or three arrows will frequently be found in a Cahuilla house. They are used for small game. As Dr. Barrows has said, the bow is apt to be shown with an apology and an explanation of the superior qualities of those made by the forefathers. Both bow and arrow are of the same type as those of the Mohave. The bow is usually of willow. The University collections however contain one made of harder wood, perhaps mesquite, and another made from the stem of a palm leaf. According to Dr. Barrows the bows of former days, at any rate the bet-

ter ones, were made of mesquite.[18] At the present day bows are all four to four and a half feet long, an inch and an eighth or an inch and a quarter wide, and three-quarters to seven-eighths of an inch in greatest thickness. The better made ones are roughly squared in cross section. Others are more rounded, and some of these are still covered with red willow-bark on the back or outside. One specimen is nothing but the split half of a willow stick. No sinew backing has been found. There is very little taper in either width or thickness from the middle of the bow to the ends. This comparatively long, narrow, and thick unbacked bow, most frequently made of willow, corresponds exactly with the Mohave bow. The string is still occasionally made of mescal fibre or sinew, but more modern substitutes, including iron wire, are common.

The arrows are of two types, being made either of a straight shaft of wood sharpened at the end, or of cane with a wooden foreshaft. The wooden arrow is typical of the Mohave, while the cane arrow is attributed by them to the neighboring Chemehuevi and Paiute of Shoshonean stock. At the present day the wooden arrow seems more frequent among the Cahuilla. Being used only for small game, neither form has a stone or metal point. It is not unlikely that such may have been the custom also in old days, even in the case of arrows intended for war. The Mohave state that stone arrow-points were not regularly used by them, and that their ordinary war arrow was the simple sharpened shaft of wood. They appear to regard the stone arrow-point as typical of their Shoshonean neighbors.

The Cahuilla wooden arrow is said by Dr. Barrows to be made from wormwood, *Artemisia ludoviciana*. This is similar to the plant used by the Mohave, *Pluchea sericea*. The arrow is about three feet long. One end is sharpened, the other notched and feathered. All the arrows seen had only two feathers. This may be due to their being intended only for small game. The Mohave used a two-feather arrow for similar inferior purposes, but a three-feathered one for war. The feathering on the Cahuilla arrows is applied as follows: a feather is split down the quill; each half is then laid against opposite sides of the shaft

[18] Barrows, 49.

and the ends fastened down by a sinew wrapping. Each half-feather is not in line with the shaft but is given a quarter twist around it.

The cane arrow is similarly notched and feathered. It consists of three or four joints of cane three-eighths or half an inch in diameter. At the front end a piece of wood is let into the hollow cane, which is then wrapped about with sinew. This piece of wood, which tapers to a point, projects from the cane some six or eight inches. In a set with two arrows of this type obtained at Banning is a third one, similarly made but with a shaft of unjointed rush replacing the jointed cane. The cane arrow is usually somewhat longer than the wooden one.

The digging stick of the Cahuilla calls for no special comment, being as elsewhere merely a sharpened stick of hard wood. A specimen obtained is four feet long and an inch and a half in diameter.

The Cahuilla flute, like that of all the Indians of California, is of the entirely open variety. It consists of a piece of cane a foot and a half long which can be looked through like a pipe. The mouth end is ground or otherwise brought to an edge at an angle of about forty-five degrees. There are four stops or holes of small size. Whether consciously or unconsciously, these are grouped into two pairs, the distance between the pairs, that is to say, between the two middle holes, being somewhat greater than between the two holes in each pair. Of two flutes in the University collections both show this grouping of the stops. The distance between the stops varies from somewhat less than two to somewhat more than two and a half inches. The distances are not exactly equal, and yet not sufficiently varied to give any appearance of design. It is not probable that they are constructed with any clear idea of the dependence of tone intervals upon the distance between them, but merely by eye or by some convenient rule of thumb. When played, the flute is held against the mouth at somewhat of an angle, not taken between the lips. The sound is produced by the column of air from the mouth striking the sharpened upper edge. The melodies have a peculiarly fascinating character. They are sweet and plaintive, though the tone intervals are likely to be arbitrary.

So far as is at present known, the straight open flute is the only one known in any part of aboriginal California. Only among the Mohave of the Colorado river does a flageolet appear in addition.

A curved throwing stick used for rabbits and birds, and a war club of potato-masher form, are mentioned by Dr. Barrows as having been used by the Cahuilla.[19] Like the pottery, they are of ethnographical interest in having been made both by the Indians of Southern California and those of the Pueblo region.

The carrying net (Pl. 11) is an important Cahuilla implement, still employed occasionally, and making it possible for the Cahuilla to dispense with the deep conical burden basket found in most other parts of California, as in the carrying net a shallower basket can be conveniently transported. The net is made of string with meshes four to five inches square. Among the Diegueño and Luiseño the carrying net is smaller, the string slenderer, and the meshes finer. The general shape of the net is that of a small broad hammock. At the two ends the net is gathered on a ring or loop of heavier cord or rope. These loops are six or eight inches in diameter. One of these rope rings has a loose end several feet long. This is passed through the other loop to join the net, much like a saddle cinch between its two rings. In this way the size of the net can be increased or diminished. The wide portion of the net, which is behind the back, contains the basket or object carried. The rope passes over the basketry cap worn by the carrier. In the desert the net seems all to be made of mescal-leaf fibre. In San Gorgonio pass a softer glossy material is employed, a string made from "wish," given by Dr. Barrows as the common reed, *Phragmites communis*.[20]

Sandals of mescal fibre are still used, especially on the desert. (Pl. 10.) They are said to be worn principally by men when out-doors at night. These sandals consist of a half-inch pad of mescal fibres held to the foot with strips of the same fibre, or by thongs. They serve as an efficient protection against

[19] Barrows, 50.

[20] Barrows, 47. According to the late Mr. Sparkman, the Luiseño called Indian hemp, *Apocynum cannabinum*, by the dialectically equivalent name wicha.

thorns. The manner of construction is not quite clear. It would appear that the fibres are bent around a cord which follows the outline of the foot, and are in some way joined or fastened along the middle of the sandal. There is no distinct weave or textile process. Among six or eight different forms of sandal in the University collections from cliff dwellings in southern Utah and Colorado (Pl. 12), there is none resembling this Cahuilla form. All these cliff-dweller sandals are made by some method of basketry or cord weaving. The strings which hold the Cahuilla sandal to the foot are not tied each time the sandal is worn, but are so arranged that the foot can be slipped into them. The strings in front pass on the two sides of the second toe, or of the second and third toes. The general arrangement is shown in the illustration.

A similar sandal, but of rawhide instead of mescal fibre, was obtained from the Chemehuevi at Cabezon. A loop of string at the back of this sandal serves as a heel strap. At the front there are two cords. These are passed on the two sides of the second toe. They are then crossed, brought backward, and passed under the heel strap, brought forward again, and tied over the instep.

A third form of footwear consists of a high moccasin of soft skin without ornament. A pair of such moccasins was secured from the Cahuilla at Cabezon.

The familiar California soaproot-fibre brush used for cleaning baskets of meal, and also as a comb, is not a Cahuilla implement. Dr. Barrows mentions brushes of mescal fibre.[21] The Serrano at San Manuel use the soaproot brush, but the Luiseño, Diegueño, and Mohave agree with the Cahuilla in making their brushes of other materials than this.[22] The only other tribes in California known not to use a form of soaproot brush, are the Pomo and southern Wintun, who employ anise-root fibres for this purpose.[23]

CEREMONIAL OBJECTS AND BEADS.

The ceremonial implements of the Cahuilla have practically disappeared. A few simple feather-ornaments worn by the medi-

[21] Barrows, 47, 54.

[22] According to specimens in the University museum.

[23] According to specimens in the University museum.

cine men in dancing can still be seen. More elaborate objects must have been used in former times. The present-day ornaments consist of owl or hawk feathers. These are usually mounted in bunches or tufts on sticks so as to stand upright. Occasionally, however, they are pendant bunches, hanging from a stick. They come in sets of threes. A bunch is worn on each side of the head, supported by a band passing around the forehead, and the third is carried in the dancer's hand.

The principal dancing regalia of the Luiseño seem to have been a short skirt or apron of eagle or condor feathers hanging from a network of string, and long flat bands of feathers. The latter resemble the familiar forehead-bands of yellowhammer quills sewed side by side, which are so typical of central California. The Luiseño bands are however mostly made of dark or black quills, and are wider and longer. It is not unlikely that the Cahuilla formerly had such ornaments.

A gourd rattle obtained among the desert Cahuilla is identical with Mohave gourd rattles except for being unpainted, like a Chemehuevi rattle in the University Museum, whereas Mohave rattles are usually red. If the Cahuilla of aboriginal times used such rattles they must have obtained them by trade, as they did not practice agriculture or raise gourds. That there was such trade with the region to the east is probable from what Dr. Barrows says of the established trail through the Chemehuevi country, and also from the fact that a Cahuilla declared to the author that the red paint used by his people came from Arizona. The Mohave obtained their red paint, or the best of it, from the Walapai to the east.

It does not seem that any of the Cahuilla still possess shell beads. These were of the thin curved type made from *Olivella* or other univalve shells. Beads of this form are found in great quantities in burials in the Santa Barbara region, where they appear to have been the most common form of currency. They differ from the thick, flat, disk-like, larger beads made from clams or similar shells, which are typical of Central California. A number of the thin *Olivella* beads, calcined black, have been found near the old Cahuilla village site at Indian Wells. They had apparently been burned with the dead or for them. These

beads were well rounded. A string of similar beads, now in the University collections, is from the Luiseño of San Jacinto. The wear on these beads shows them to possess some age, but they have been rudely chopped into shape and never ground round. Strung beads were measured in a certain way around the circumference of the hand. This practice is found among the Luiseño, the Yokuts, probably the Gabrielino, Serrano, and Chumash, and perhaps among other tribes.

The accompanying plate 13 shows a number of shell disk beads from various parts of California. In the upper left-hand corner are the Luiseño beads mentioned. It will be seen that the outline is much less regular than in any of the other specimens. To the right are similar beads from Santa Catalina island and from Point Sal in Santa Barbara county. The second row of figures shows beads from Santa Rosa island. Of these the first three groups are of the same concave type as the preceding. The fifth group is made of thin pieces of haliotis. The third row on the plate shows beads from shellmounds about San Francisco bay. The first three, which are from burials in the Emeryville shellmound, are of the concave Southern California type. The square beads are from the West Berkeley mound and are unusual. They are not made from univalves, but apparently from mussel or haliotis. The lowest row on the plate shows beads of the thick Central California type, apparently all made from clams. The first, to the left, is from the Pomo Indians. The second has passed through fire and was excavated in Napa county. The third is from a prehistoric site near Stockton, and the last, in the lower right-hand corner of the plate, from the modern Maidu Indians. The difference between the typical forms of Southern and Central California is obvious, but it appears that at least some of the prehistoric inhabitants of the shellmounds on San Francisco bay used the southern form of bead.

HOUSES.

The houses of the desert Cahuilla remain very much as described by Dr. Barrows.[24] Their appearance and construction

[24] Barrows, 35.

is shown in plate 14. These houses bear some resemblance to the houses of the Colorado river tribes, especially in the upright forked posts supporting the roof beams, and in the character of the thatching. They differ, however, in being but slightly or partially covered with sand or earth. In fact many houses are without any covering other than the brush thatching. In the Mohave house the sides are quite low, and both sides and roof are pretty thoroughly covered with a layer of sticks. The outside layer of brush serves the purpose rather of preventing the thick covering of sand from shifting through the spaces between the wooden framework, than of being a covering in itself. The Cahuilla house is distinctively an airy brush-house, the Mohave structure a heavy close earth-house. The Mohave and Cahuilla resemble each other much more closely in the character and use of their shades or ramadas and wind-breaks, which are usually constructed in front of the entrance to the house.

At the Banning reservation a sweathouse is still in use (Pl. 15). From the outside its appearance is that of a small mound. The ground has been excavated to the depth of a foot or a foot and a half, over a space of about twelve by seven or eight feet. In the center of this area two heavy posts are set up three or four feet apart. These are connected at the top by a log laid in their forks. Upon this log, and in the two forks, are laid some fifty or more logs and sticks of various dimensions, their ends sloping down to the edge of the excavation. It is probable that brush covers these timbers. The whole is thoroughly covered with earth. There is no smoke hole. The entrance is on one of the long sides, directly facing the space between the two center posts and only a few feet from them. The fireplace is between the entrance and the posts. It is just possible to stand upright in the center of the house. This building was said by the old man who owned it to be used only for sweating. Its size, which would prevent any considerable gathering for ceremonial purposes or dances, corroborates his statement. Throughout Southern California, as well as the southern portion of the central region of the state, the use of the sweathouse was confined strictly to this purpose, ceremonies being held either under a simple shade or in a brush enclosure. In most of northern California the so-called

sweathouse is of larger dimensions and was preëminently a ceremonial or assembly chamber.

SOCIAL AND RELIGIOUS LIFE.

Practically no information is available as to the social and religious life of the Cahuilla, but the information obtained in answer to a few inquiries goes to show their close affiliation with the other Mission tribes rather than with the agricultural Yuman tribes to the east. There is no evidence of any totemic clan system as among the Mohave. The chief or "captain" seems to be such principally through the possession of property. He is always regarded as the richest individual in the community. At ceremonies and gatherings he supplies food for the assemblage. This dependence of social rank on wealth is a typically Californian trait. The Luiseño follow the same practice. The Mohave chieftainship, so far as not influenced by hereditary succession, is dependent on valor.

The mythical origin of the Cahuilla is said to have been in the north, in which account they agree with the Luiseño. The large low-flying meteor, dakush, is distinguished from ordinary shooting stars, ngamngam, and is said to live in San Jacinto mountain, a belief which agrees with those of both Luiseño and Diegueño. The eagle "is the general of the Indians," volunteered a Cahuilla, by which no doubt he meant to express a mythological and ceremonial importance of the bird parallel to that which it has among other tribes of Southern California.

The most important ceremony of the Cahuilla seems to have been the annual tribal mourning gathering, hemnukuwin. This was in addition to singing immediately after a death. Jimson-weed or toloache, kiksawal, which plays so important a part in the initiation ceremonies of the Luiseño, Yokuts, and other tribes, was customarily used for religious purposes. It was not learned definitely that it was expected to be drunk by every boy or young man of the tribe, but such seems to have been the case. It was thought that the objects or events seen in the visions caused by the drink would come true. It was especially believed that the use of the jimson-weed would bring riches, no doubt in connection with the general idea that it conferred power and the attainment

of desire. It was also used as a medicine, especially in case of broken bones. The Yokuts also employed it extensively for this purpose. It appears to have been efficacious in such cases by rendering the sufferer unconscious or insensible of pain for a number of days, in which time the healing took place. It is said by the Cahuilla that the amount of extract of the root that is drunk must be judged by a man experienced in its use, and that a number of deaths have resulted from the taking of excessive quantities.

The position of the medicine man or hechicero among the Cahuilla apparently corresponds very nearly to that of the medicine-man among the other Mission tribes and the Yokuts. This is especially brought out by the fact that he is the principal person who dances. The Mohave medicine-man acts as important a part as his colleague in these tribes, but as a causer and curer of disease, and not as the initiator of public ceremonies.

The ceremonial drinking of jimson-weed is known as pem-pa-wvan kiksawal. A girls' puberty ceremony, the "roasting of girls" of the Mission tribes, seems to have been practiced. It was called pem-iwvlu-niwom.

Altogether, as one compares the culture of the Cahuilla with that of other tribes of California, it is seen that the several striking resemblances that they bear to the Mohave and Yuma are due to proximity, or to the similarity of the two natural environments. In so far as these causes are not operative, the Cahuilla partake of the culture common to the tribes of the coast and inland of Southern California, in other words, the Mission Indians. Many resemblances with the Yokuts are also noticeable. These are of course not confined to the Cahuilla, but are common to all the Mission Indians. Such similarities are not restricted to the material side of life, but are conspicuous in the general social and religious organization. On the side of mythology, however, the Yokuts resemble the northern Californians, and the Mission Indians the tribes of the Southwest.[29] The physical type of the Yokuts, or at least their southern tribes, has also been shown to be nearly identical with that of the

[29] Present series, IV, 167, 1907; Journ. Am. Folk-Lore, XIX, 309, 1906.

Mission Indians,[26] though the possible historical significance of this resemblance is weakened by the similarity of both types to the Mohave-Yuma physical form. All in all, the Yokuts form part of the great Central culture group of California, and the Cahuilla belong to the ethnographic province of Southern California, just as their respective habitats form part of distinct physiographic areas. The instances of resemblances between the two groups are however so numerous, that it is evident that there must have been considerable cultural interinfluence between the whole body of Southern California tribes on one side of the Tehachapi mountains, and the Indians of Central California on the other side.

May 14, 1907.

[26] Boas, Proc. Am. Ass. Adv. Science, XLIV, 261, 1896.

CATALOGUE NUMBERS OF SPECIMENS SHOWN IN PLATES.

In all plates the specimens are given in order from left to right, and then downward. Unless prefixed by 2-, the numerator 1 is understood.

Plate 1: 10956, 11083, 11125.

Plate 3: 11098, 11121, 11093.

Plate 4: 11103, 11113, 11052, 10988, 11051, 11027.

Plate 5: 10976, 11047, 11065, 10975, 11034, 10977.

Plate 6: 11063, 11008, 10986, 11066, 11104, 11089.

Plate 7: 11079, 11111, 11042, 11130, 11105, 11007, 11057, 11067.

Plate 8: 11107, 10979.

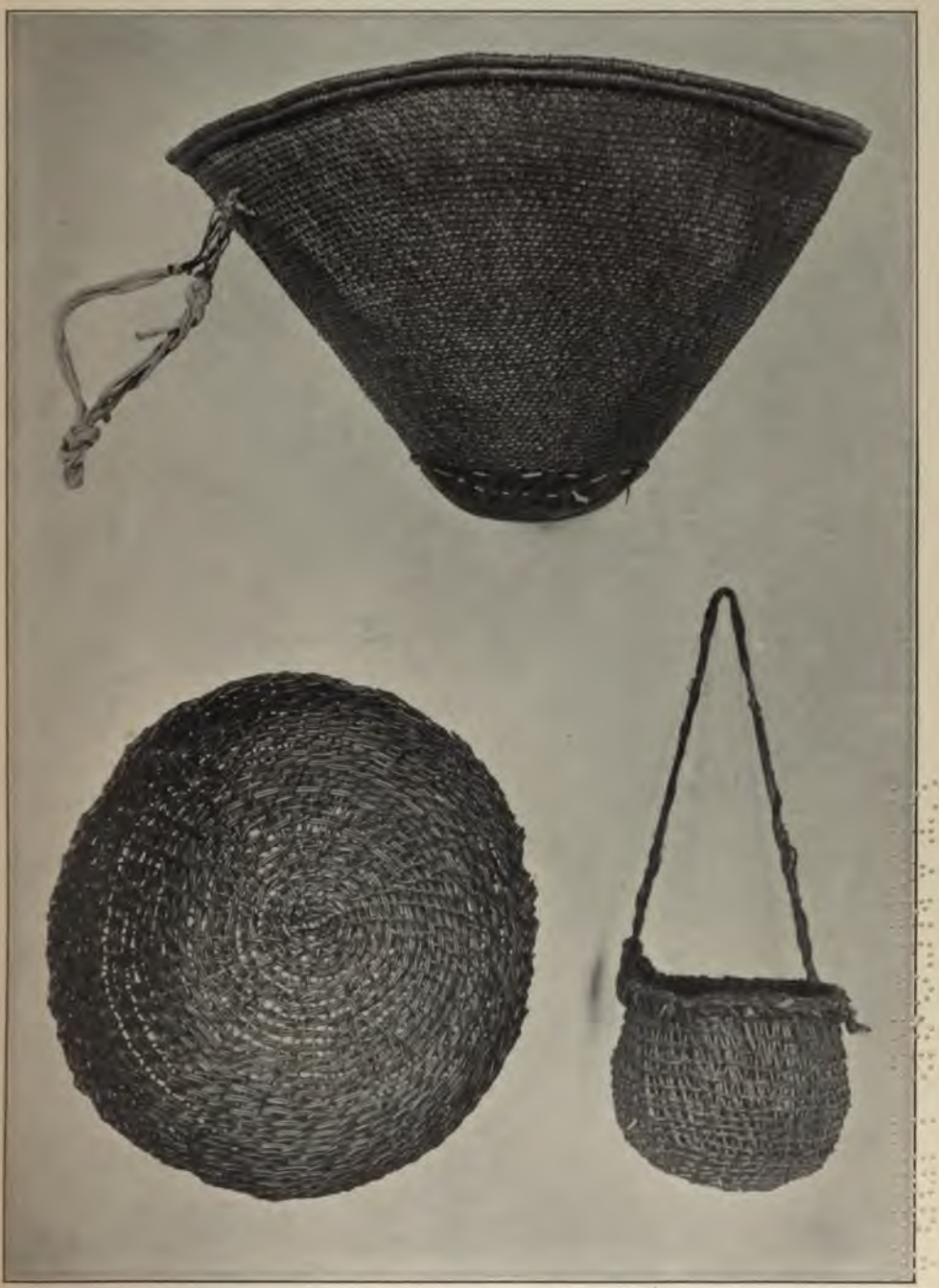
Plate 9: 10985, 10990, 10992, 11040, 11091.

Plate 10: 11095, 10991, 11067.

Plate 11: 10997.

Plate 12: 2-3628, 2-3624, 2-3604, 2-3611, 2-3612, 2-3586, 2-3600, 2-3568.

Plate 13: 11129, 8462, 1291, 6708, 6394, 6522, 6314, 6311, 8788, 8773, 8798, 7496, 2689, 6971, 3362f, 7462.



CHEMEHUEVI CARRYING BASKET.

CAHUILLA OPEN-WORK BASKET.

LUISEÑO OPEN-WORK BASKET.

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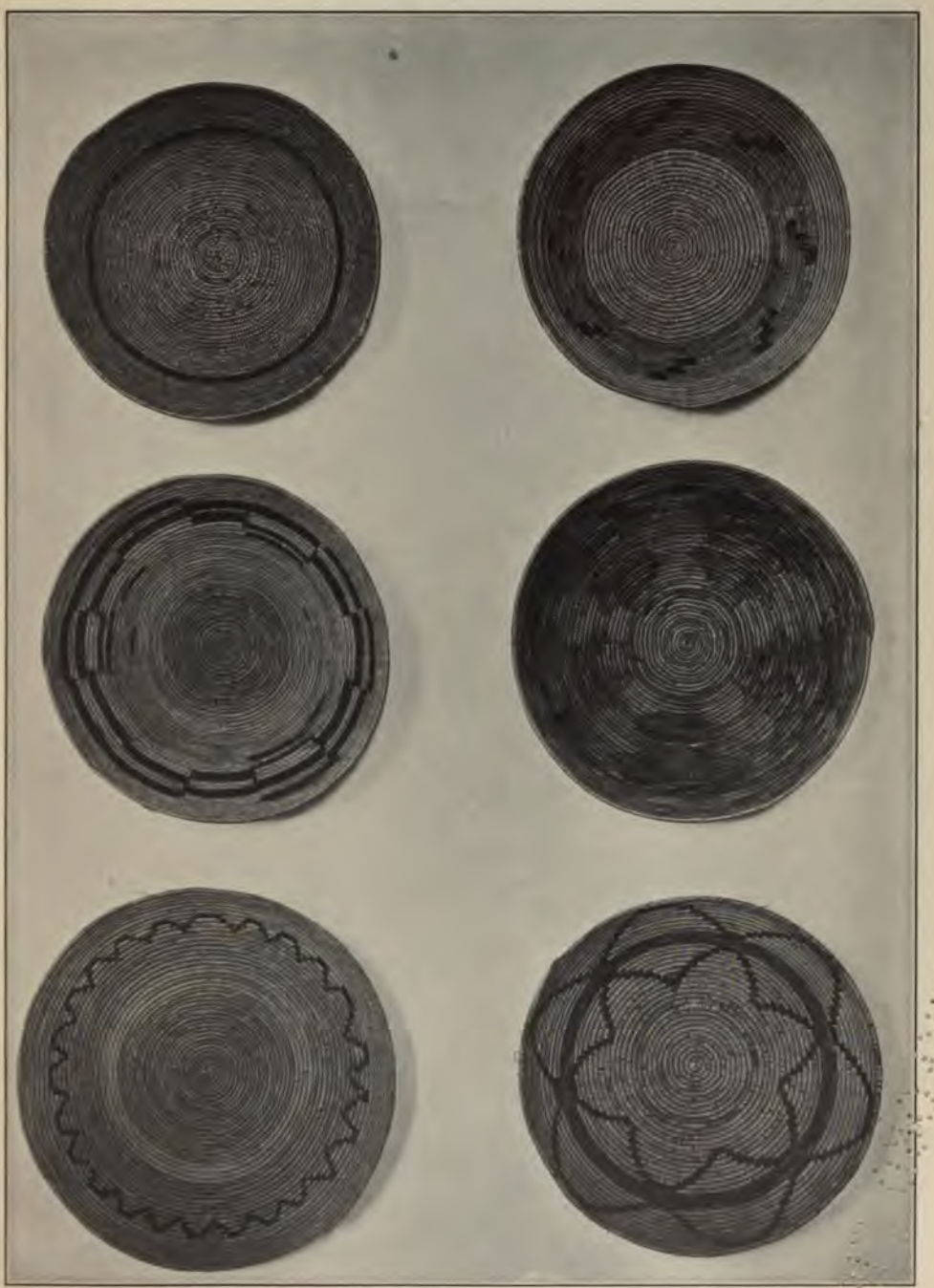
STORAGE BASKETS FOR MESQUITE.

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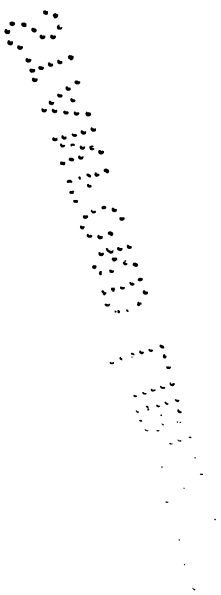


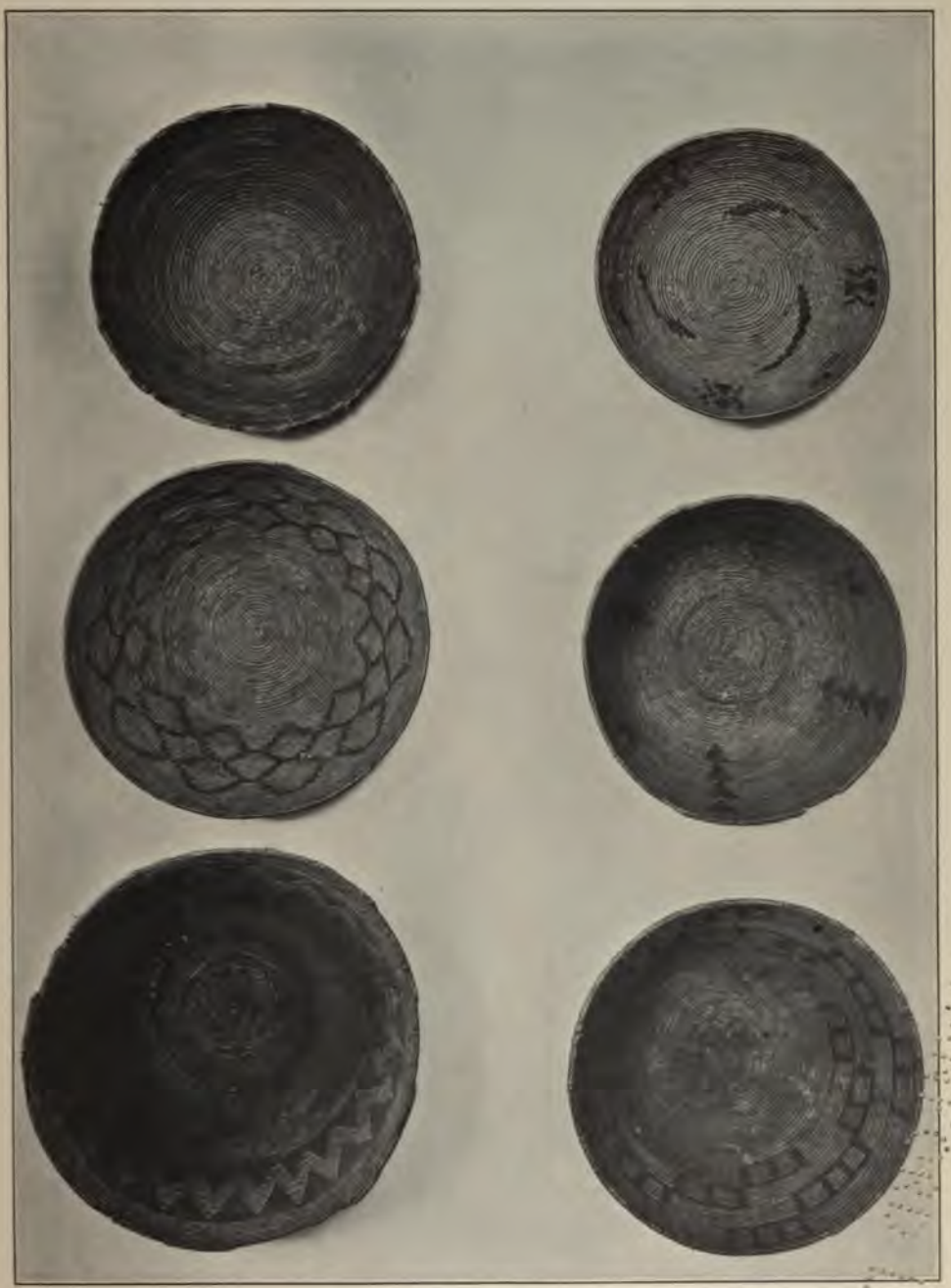
SEED-BEATERS.





FLAT BASKETS.





SHALLOW BASKETS.





DEEP BASKETS.

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BASKETRY CAPS AND GLOBULAR BASKETS.



PESTLES FROM SAN GORGONIO PASS AND THE DESERT.

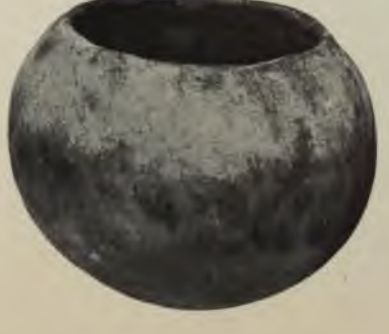
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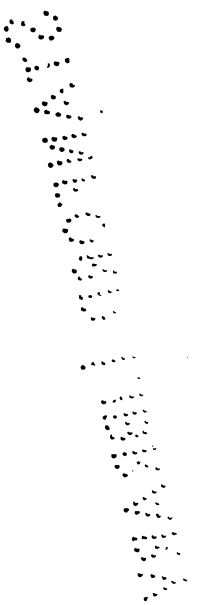
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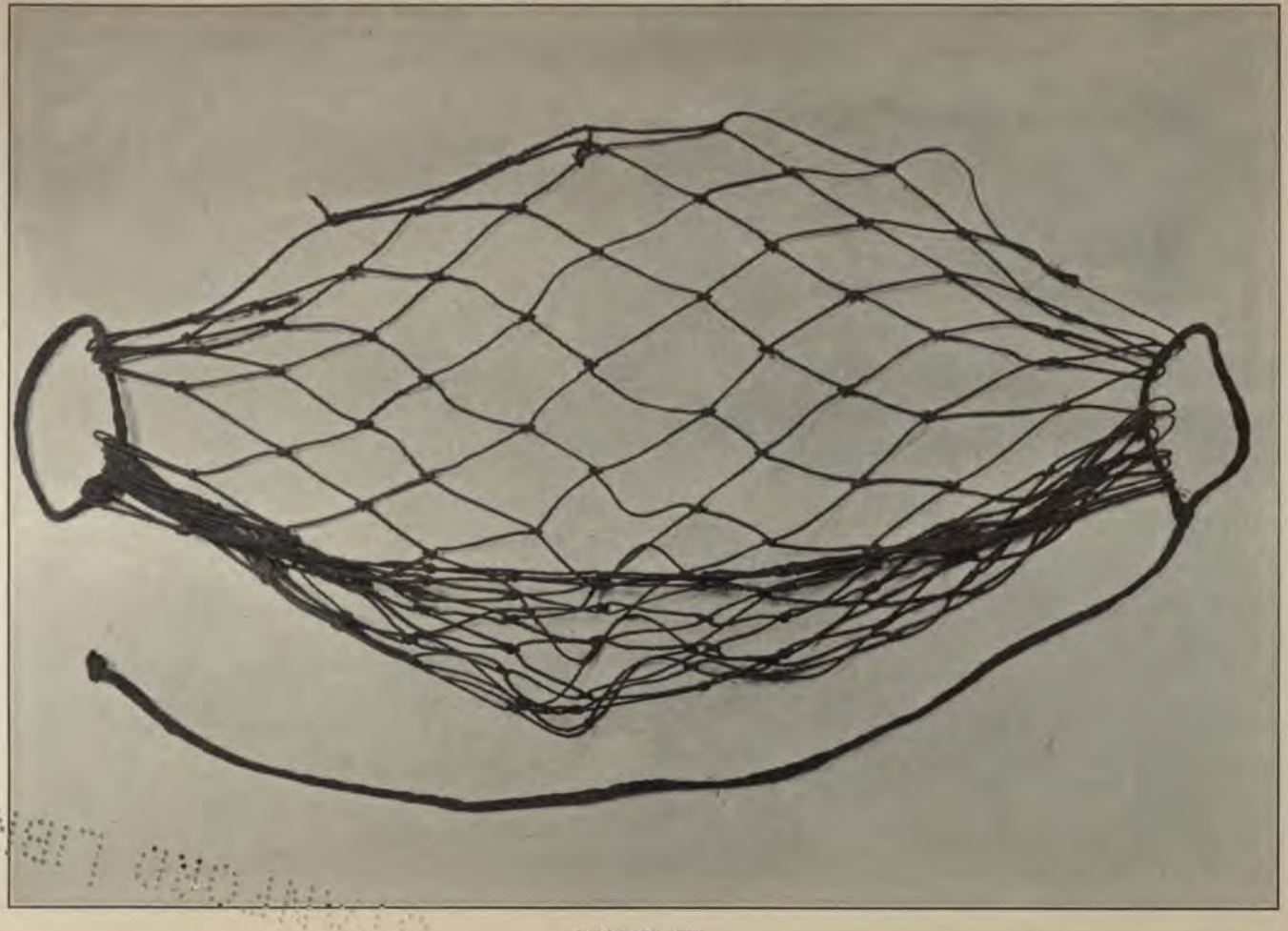
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PAINTED JAR AND FIBRE SANDALS.



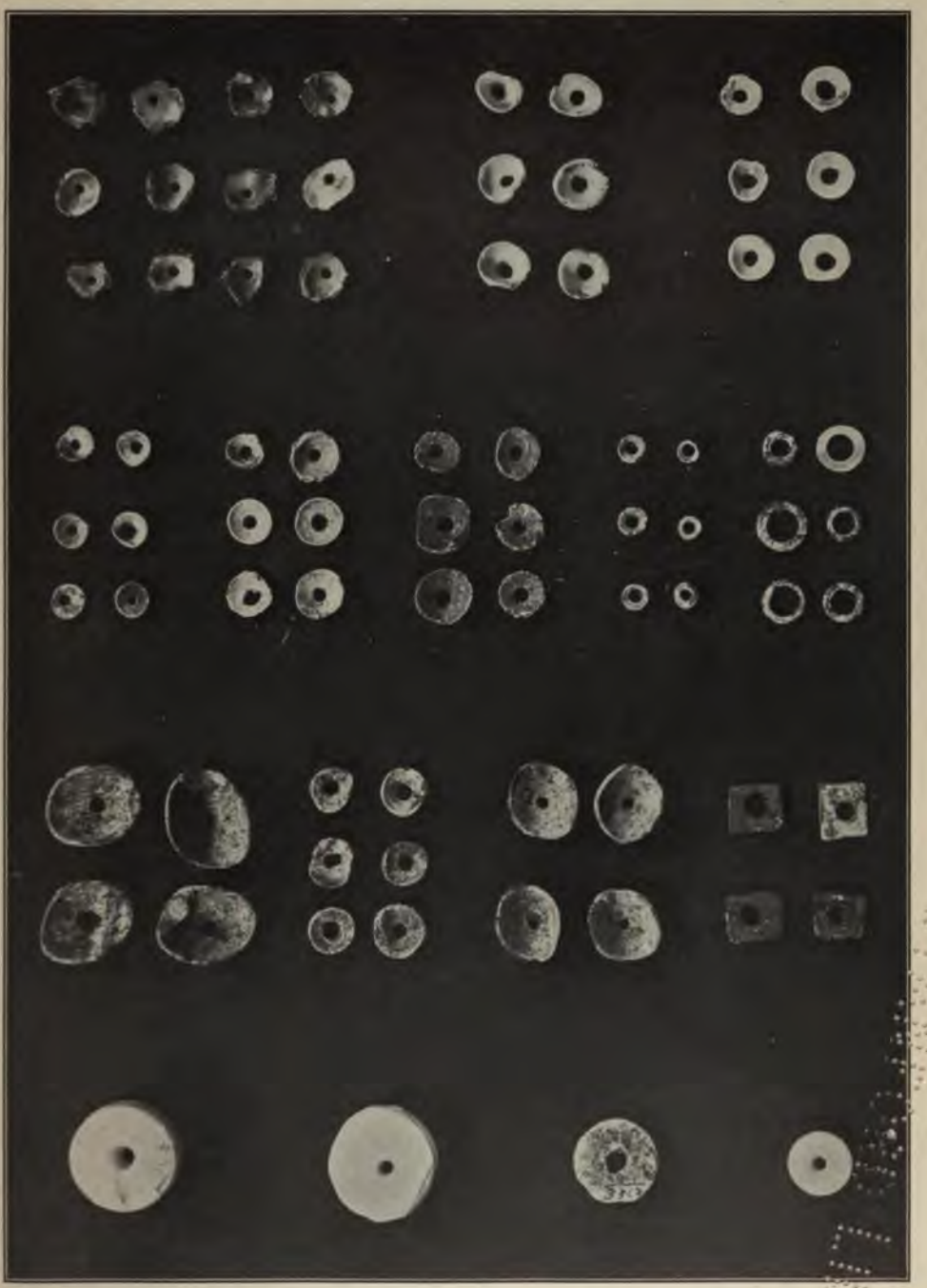


CARRYING NET.



SANDALS FROM UTAH AND COLORADO CLIFF DWELLINGS.

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DISK-SHAPED SHELL BEADS FROM CALIFORNIA.

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MODERN HOUSES IN THE DESERT.

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BASKET MORTAR AND SWEAT-HOUSE.

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THE RELIGION OF THE LUISEÑO INDIANS OF SOUTHERN CALIFORNIA.

BY

CONSTANCE GODDARD DuBOIS.

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EDITOR'S NOTE.

Miss Constance Goddard DuBois, the author of the present publication, is well known for her literary work dealing with Southern California. Of recent years she has earned distinction for her accounts of the myths and ceremonies of the Diegueño Mission Indians of this region, which have been published in several anthropological journals. In the summer of 1906 Miss DuBois spent some weeks in San Diego county, in field studies with the Luiseño Indians. This work she carried on under the Ethnological and Archaeological Survey of California, which Mrs. Phoebe A. Hearst's generosity has made it possible for the Department of Anthropology of the University of California to conduct. In the present paper Miss DuBois reports the results of this study, adding certain information acquired during her previous visits to the Mission Indians.

Of the tribes formerly attached to the Franciscan missions of California the Luiseño and Diegueño are the only ones to survive in any numbers. Inasmuch as they have been fully under European influence for more than a hundred years, and as for nearly two generations they lived under a direct and enforced Christian discipline, it is as surprising as it is gratifying that so much of their own inner life still remains as Miss DuBois has been able to show in this paper, and that at least the memory of their old life continues unaffected by civilization. But it need hardly be said that the best of this information is all contained in the minds of a few of the old men, and that with their passing it also will disappear forever.

The Luiseño and Diegueño languages are distinct, forming part respectively of the great Uto-Aztekan and Yuman families; but the two tribes are physically similar, and share in common

the majority of their customs, arts, and beliefs. The terms Diegueño and Luiseño originally referred to the Indians of San Diego and San Luis Rey missions, irrespective of their native affiliations; but they have come to be the customary names of tribes, or more exactly, of two groups of people each speaking a common dialect.

Miss DuBois introduces her account of the religion of the Luiseño with a discussion of the beliefs and practices centering about the divine being Chungichnish, the central figure in Luiseño religious worship. Under the name of Chinigchinich this character has furnished the title for the missionary Boscana's account of the closely related neighboring Indians of mission San Juan Capistrano, by far the most illuminating and valuable account of the Indians of California that the world owes to the mission period. Miss DuBois's Luiseño informants state that the Chungichnish worship came to them from the coast and from the north; and that they in turn transmitted it to the Diegueño. There seems every reason for believing this statement; and although it is necessarily uncertain to what extent any uncorroborated tradition of an uncivilized people can be accepted as historically true, the interest and value of such traditions is clearly as great to those who may be skeptically inclined on general grounds, as to those who, for good reasons in particular cases, take them more nearly at face value.

Miss DuBois' account of Luiseño symbolism, as embodied especially in the wanawut or rope-figure, and in the ground-painting, is of special interest on account of the slight development of symbolic religious expression heretofore discovered among the California Indians. It is significant that the Luiseño ground-paintings are of a comparatively simple geometrical character, recalling basketry patterns, and that they indicate the existence of objects rather than that they attempt to picture their form, or supposed appearance, even in a conventional style of representation. It seems uncertain whether these paintings are to be regarded as historically the result of the same cultural influences that gave a similar form of expression to the Pueblo and Navaho Indians. The geographically intervening Yuman tribes on the Colorado river show no trace of any equivalent practice.

Almost all the ceremonies of the Luiseño are either commemorative of the dead, or serve to initiate boys and girls into the condition of tribal and religious manhood and womanhood. The principal initiation of boys is the toloache ceremony, in which the central figure is the drinking of a stupefying decoction of jimsonweed, Spanish toloache.

The two new versions of the Luiseño creation given by Miss DuBois are fuller and more esoteric than any previously obtained among the Mission Indians. The succession of births or existences, some of them psychic, evidences an unusual point of view for an American people, and is reminiscent of Oceanic and Asiatic ways of thought. Supplemented by Boscana's two accounts of the creation at San Juan Capistrano, and by the Luiseño and Diegueño versions previously collected by Miss DuBois and others, these two valuable myths give an adequate conception of the Mission Indians' beliefs concerning the origin of things.

In 1904 the editor had occasion to make a short stay among the Luiseño of Rincon, Pauma, and Pala, in the course of which certain information was acquired on the subjects here studied by Miss DuBois. While far less complete than the results of Miss DuBois, this information was independently gathered, and confirms her conclusions on a number of points. It has therefore been added in an appendix.

It is a source of regret that an expression of obligation in which Miss DuBois would join the editor can no longer be made. Mr. P. S. Sparkman of Valley Center, known for his long and patient study of the Luiseño language, was kind enough to examine and report on all Luiseño terms occurring in this paper. By his permission his valuable renderings, translations, and comments on these terms have been given in footnotes signed S, in all cases where they add anything to Miss DuBois's use of the words. Soon after the completion of this labor of love, Mr. Sparkman met an untimely end. It is a source of satisfaction that his notes in this work may at least serve in some degree as a monument of his intelligent, careful, and persevering study of the Luiseño language.

A. L. Kroeber.

THE RELIGION OF THE LUISEÑO INDIANS OF SOUTHERN CALIFORNIA.

INTRODUCTION.

In offering the results of several years research work among the Mission Indians, I have purposely avoided any attempt to give to the material collected either a technically scientific or a literary form; my object being to put into the hands of those who may care to use them the documents of the case, as it were, as nearly at first hand as possible.

The bare statement of a fact or rendering of a myth may be sufficient where all the premises are known; but the Mission Indians have been long unknown or misunderstood. Only fragments of the past remain, and in their elucidation the character of the narrator plays an important part. The personal form of narrative has therefore often been employed. This is purely a matter of convenience and should be accepted as such. The words of the interpreter are used whenever possible in literal form, his rendering being faithfully given.

The obscurity of the subject has made it difficult to obtain a complete understanding of matters which in the old days were held too sacred for communication; the veil of secrecy cast over the Chungichnish worship, as noted by Boscana, having persisted to the present day. That absolute correctness has been reached is not to be maintained; but no pains have been spared in attempting this; and it is hoped that if mistakes exist, they may be corrected by later investigation.

The two most important tribal remnants among the Mission Indians today are the Luiseños, whom I have studied chiefly at La Jolla and Potrero in the mountains,[1] and the Diegueños, at Mesa Grande, Campo, and Manzanita.

[1] These places must not be confounded with La Jolla on the coast, and Potrero near the Mexican line.

Superficial observers, founding their opinion upon Baegert's unfriendly estimate of the Lower Californian Indians, and also upon the external conditions of the Mission Indians, the native simplicity and poverty of their life, have classed them extremely low in the ethnic scale. It has even been stated that they were the lowest type of humanity on the face of the earth.

Nothing could be more erroneous than these sweeping generalities based upon the vaguest premises. Acquaintance with Luiseño mythology reveals a loftiness of conception, a power of definition and of abstract thought, which must give these people claim to a place among the dominant minds of the primitive race. On the other hand the Diegueños show in their myths a certain consistency in the narrative, a power of sustained invention, a dramatic instinct, as it were, which makes them supreme as story-tellers. The Cuyahomarr myth is an important survival of this type.

It would be difficult to account for the blending of these two distinct mythologies into one religious ritual if historical evidence did not assist in explaining the fact.

Fortunately it is possible to trace the origin and progress of an Indian propaganda unique in this, that it occurred comparatively late in time, and was carried on under the very eyes of the Spanish and Mexican priests by their Christian converts, whose zeal for their ancient religion may have been increased by the example of missionary effort shown on their behalf by the white men.

Lucario Cuevish, who will be referred to later on as one of the most important informants used, was born at San Luis Rey, and was still living there at the time of the Mexican-American war. He remembers that when the mountain people went down to the Mission from the Potrero and La Jolla region, being under the charge and surveillance of its priest, they were "given toloache," that is, initiated according to ancient rite, by the Indians there.[2] After the padres left, the mountain Indians stayed at the Mission for some time. Padre Antonio is the one he remembers as being in charge, and he allowed the Indians to keep up their religious dances. The padres never objected to this. The In-

[2] See the account of the Toloache ceremony given below.

dians who could not talk Spanish were allowed to pray in Indian in the church; but they kept up the old dances outside.[3]

The Chungichnish belief, with its ceremonial and ritual, came originally from the north, say the Luiseños, and was brought from there to the islands of Santa Catalina and San Clemente. From these islands,—both to be seen on a clear day from the mountains of the mainland,—it was brought to San Juan Capistrano; from Capistrano to San Luis Rey; and from there they brought the ceremonies and "gave toloache" in all the upland Luiseño places, such as Rincon, Potrero, Yapiche, and La Jolla, and carried the ritual to the Diegueños of Mesa Grande and Santa Ysabel.[4]

The Luiseños say that the Diegueños of Mesa Grande originally had no songs of their own for certain rituals, but that they sing the Luiseño songs in such religious ceremonials as the eagle dance and the dance with the eagle feather skirt. These were taught to them as part of the Chungichnish ceremonial, together with the new style of dancing which came to the mountains from the coast. On the other side of the Mission of San Juan Capistrano there was a large Indian village, and from theer the Chungichnish worship was brought to San Luis Rey. San Luis Rey taught Pala; Pala taught Pauma; Pauma taught Potrero; Potrero gave it to La Jolla with the songs and the present manner of dancing. This new manner is full of gestures and violent motions, while the old style of dancing, still to be seen among the Diegueños of Manzanita, was performed in a quiet and restrained manner, consisting simply in bending and swaying the body, and moving and stamping the feet in varied measure according to the rhythm of the songs.

This took place perhaps a hundred and twenty years ago. The grandfather of the informant Salvador told Salvador's fath-

[3] This tolerance of the Catholic church makes it preëminent in mission work; at the same time it is not likely that any of the fathers except Boscana fully realized the significance of the Indian dances.

[4] Venegas's account of the Indians of Lower California contains much that might have been written about these Indians. Their religious ceremonials which are constantly misunderstood by the priests, the mode of living and manner of dress, the training of boys, the rules of the "hechiceros" (medicine-men), the sacred objects such as the feather band described below, the reverence paid to the raven, all this,—especially as relating to the most northern Indians of the peninsula and those of the southern Santa Barbara islands,—shows a close connection between Lower California and what is now Southern California.

er that when Potrero came to teach these ceremonies and to "give toloache" to La Jolla, the toloache bowl would hold a quart or more, and all who drank became crazy and nearly died; and the La Jolla people were frightened, fearing their sons were going to die, and they nearly had a fight with the Potrero people. The La Jolla people in turn went later to Warner's Ranch and taught the Indians there, the so-called Cupeños,[5] these ceremonies and dances and gave them toloache; and then went further and taught the Mesa Grande Indians and those of Santa Ysabel, both Diegueño.

All this, then, represents a genuine missionary movement in a primitive Indian religion. Its success was due to the fact that the religion of Chungichnish had every requisite of a conquering faith. It had a distinct and difficult rule of life requiring obedience, fasting, and self-sacrifice.

It had the sanction of fear. No alien faith has ever been imposed without this; but where Christian and Mohammedan invoked hell-fire, the worshipper of Chungichnish invoked the avengers of the hill, the stinging weeds, the rattlesnake and the bear, who injure by bodily harm those disobedient to the faith.

It had an imposing and picturesque ritual. And above all it had the seal of an inviolable secrecy, so alluring at all times to the human mind.

Boscana says of these Indians: "A veil is cast over all their religious observances, and the mystery with which they are performed seems to perpetuate respect for them, and to preserve an ascendancy over the people." How great were this respect and fear I know well from repeated experience. A century of allegiance to the Catholic faith barely suffices to give the old men courage to reveal the sacred mysteries of the ancient religion.[6]

The most important of these Chungichnish rites was the toloache ceremony, as initiatory to the rest.

[5] The people of the village of Kupa or Gupa, speaking the Agua Caliente dialect, about equally distinct from Cahuilla and Luiseño.—Ed.

[6] One of my story-tellers was about to sing with great reluctance some songs descended to him from his father, when an apparition of Chaup or Takwish, the electric fire-ball or meteor, in broad daylight, so terrified him as an omen that he refused to reveal anything further.

INITIATION CEREMONIES.

The Toloache Ceremony.[7]

The jimson-weed, *Datura meteloides,* in Spanish toloache, Luiseño naktamush,[7a 8] is one of the most imposing plants of Southern California. Its gigantic bluish-white bell-shaped flowers, opening towards evening and fading when the sun of the following day becomes intense, contrasted with the dull green leaves, attract the most casual notice, as they occur in waste spaces in field and roadside, growing by hundreds where conditions favor their increase. The plant is remarkable in the extent of its distribution. Undiscouraged by the intervening wastes of desert, it appears throughout Arizona as in California.

The roots of the toloache contain a narcotic principle which has a marked effect on the mind; and the taking of this is the center of an important ceremony. It is fifty years or more since the toloache ritual has been celebrated by the Luiseños; but for convenience the present tense is used.

At the time of the Mani,[9] the toloache ceremony, a big fire is lighted at the main place of gathering. They have two places, and the one where they actually give the toloache is at a distance from the other. The places are made ready in the day time, but the ceremony does not begin till evening. In the main place the sacred enclosure of brush, the wamkish, is built in a circle to about the height of a man. On the ground inside are placed the sacred ceremonial objects: the tamyush or sacred stone toloache bowls, large and small,—all but one which is to be used in the other place in drinking the toloache; feather head-dresses and eagle-feather skirts; and the paviut, the sacred sticks with flint in the end.

[7] Based on an account given by the Luiseño informant Lucario Cuevish.

[7a] Vowels have the continental sounds, ai, au, ä, and ü being as in German. The letter x represents the sound of German ch or Spanish j. V, being bilabial in Luiseño, is much more like w than in English.—Ed.

[8] Naktomush.—S.

[9] Mani or pa'nish mani.—S.

The tamyush, which since the last celebration of the ceremony have been buried in the ground, in a place known only to the chief, are taken out in good time and freshly painted so that they look nice. They are painted red, white, and black. Of the sacred ceremonial objects the tukmul[10] is not in the main enclosure but at the other place. The tukmul is a flat winnowing basket sacred to the Chungichnish rites. It belongs to the men, that is, is possessed by every initiate, and during every ceremony is placed on the ground containing grain, the sacred stone pipes, or other objects.

When it grows dark the people gather at the main place. The chief has charge of the religious conduct of the ceremony; but to see to the correct performance of every part of it during the four or five days of its continuance, two officers, Paha,[11] are selected, with varied functions.

They must go around to the different houses to collect the candidates for the Mani, carrying some of the little boys who may be found asleep. One Paha is detailed to supervise the main place; the other, the place for drinking the toloache. By a well understood law no one is allowed to run around or make any noise. The Paha must be a hechicero, or shaman, of repute; and he could tell by looking at the mother of a boy whether she had been doing wrong in any way. No woman could be admitted to the ceremony who was unclean, unchaste, or menstruating.

It is dark in the place where they take toloache. The large tamyush selected for the purpose is placed on the ground before the chief. It contains the root, previously prepared and dried, perhaps a year before.[12] The chief pounds the dry scraped bark with the stone mano (muller or pestle) to the accompaniment of a curious recitative, not a song: "Chanyoko, yoko," while the boys stand waiting in the darkness. The powder is then placed in a small twined sifting basket[13] and sifted again into the tam-

[10] Tukmul is given by Boscana as tucmel.—Tukmal.—S.

[11] Paha', manager of morahash dance and of mani.—S.

[12] Among the Diegueños the juice is said to be expressed from the fresh root and mixed with water. Only a root growing towards the north is selected. The song used in this connection in Diegueño begins: "Choki, choki."

[13] University of California, Department of Anthropology, Museum number 1-10619.

yush, which is filled with water. The Paha goes about whispering: "Keep quiet all of you. Do not talk. Everyone keep quiet."

The chief superintends the drinking, and as the candidates kneel in turn before the big tamyush to drink out of it, he holds the head of each with the palm of his hand under the forehead, and raises it when they have drunk a sufficient quantity of the liquid, watching to see that they do not drink too much. They drink from the tamyush in which the toloache was mixed.

They give the toloache to the boys in the dark; and while it is being administered, the Paha goes over to the main place three times in succession, and the third time tells them to get ready, for Mani is coming. He sings a curious recitative.

The men and boys in this ceremony do not wear clothes. Before they start, each man takes charge of one of the boys who have partaken of the drink, and they stand and get ready. Now begins the marching song or recitative as they march to the main place, taking the boys along. The words of this recitative are: "Tamyush noya kwoya, Tamyush walks by twisting."[14] In the early days this tamyush, finely painted, out of which they drank toloache, when it was time to march to the main place, would walk along by itself. This was done with a twisting motion from side to side,—as a heavy barrel is moved.

Tukmul, the sacred winnowing basket,[15] would do the same thing. He would run by himself to the main place; so would the other sacred basket, piavala,[16] a small basket in the shape of an olla. These three, tamyush, tukmul, and piyevala, would have to stop three times on their way to the main place.

The dancers crawled in on their hands and knees, making the noises of birds and animals. They had some secrets about this, shamanistic power, and could talk in the language of these birds

[14] University of California, Department of Anthropology, phonograph record 394.—Tamyush ngoxya (x German ch) kwoya, tamyush walked twisting.—S.—Dr. R. B. Dixon, in the Northern Maidu, Bulletin American Museum of Natural History, XVII, 137, 1905, says that the Shasta Indians of Northern California believe that certain mortars move of themselves, and describes their ceremonial use by the Maidu.—Ed.

[15] University of California, Department of Anthropology, Museum number 1-10620.

[16] Peyevmal; peyevla, a large storage basket.—S.

and animals, hawks and owls, and ravens and weasels. One could hear this but could see nothing.[17]

Then they march around the fire, and dance singing the toloache song. The boys soon grow dizzy and fall down, and they carry them to the other place and leave them there, under the charge of some of the old people, until the toloache intoxication wears off.

After this come the dances and the Chungichnish songs, and sometimes new songs are composed at this time. Some of the old men have composed them to teach to the boys, and they dance all night long. At daylight they sing the song: "Tukaina wonipa,"[18] which means to go off; and they march to the other place where they took toloache, where they remain during the day.

The boys cannot eat anything. The Paha watches to see that they do not eat more than two or three spoonfuls at most; but the others eat.

When night comes each man takes one of the boys to the main place; and before all the people these old men do magic tricks (Pl. 1) to teach the boys how to perform them. In the old days when they took Mani these people could do anything. They

[17] Lucario knows nothing about personal "totem animals" or guardian spirits with which this part of the ceremony was probably connected. Boscana's account of the connection of the guardian spirit animal with the toloache ceremony is so clear to the modern reader of his work as to be undoubtedly founded on fact; and at Mesa Grande it was possible to extract enough from some of the old men to be sure that the personal totem had long ago existed among the Diegueño Indians. Boscana says: "At the age of six, or seven years, they gave them a kind of god, as protector; an animal, in whom they were to place entire confidence, who could defend them from all dangers, particularly those in war against their enemies That they might know the class of animal, which the God, Chinigchinich, had selected for their particular veneration, a kind of drink was administered to them, made from a plant called *Pibat*, [*i.e.*, tobacco] which was reduced to powder, and mixed with other intoxicating ingredients. Soon after taking this preparation they became insensible, and for three days were deprived of any sustenance whatever. During this period they were attended by some old men or women, who were continually exhorting them to be on the alert, not to sleep for fear the coyote, the bear, the crow, or the rattlesnake might come; to observe if it were furious or gentle, and to inquire of the first that should come, what were its desires. The poor Indian thus intoxicated, without food or drink, suffering under delirium, beheld all kinds of visions; and when he made known that he had seen any particular being, who explained the observances required of him, then they gave him to eat and drink, and made a grand feast; at the same time advising him to be particular in obeying the commands of the mysterious apparition." (Op. cit., 270-1).

[18] Tekaia wenepa: said to refer to the placing of the bones of Ouiot in a receptacle and pouring them into a hole in the ground.—S.

could put the feather head-dresses in the fire, and they would not be burned; and they could make the raven talk and everything was done as he said. They were so full of Chungichnish.

Not so very long ago, a shaman cut his tongue off, blood ran all over his breast, and he held it out so everyone could see. Then he put it back and it grew together again. This was while the Indians all lived where Trujillo's land is now. This spot was a prehistoric Indian village site, the author's camping place at Potrero.

In the same place at this time a shaman stood up and another one shot him with bow and arrow. The arrow went deep into his breast, and he vomited blood and fell down apparently dead. The people all began to cry when they saw him shot; but the second shaman pulled the arrow out, doctored him and blew on him, and he got up perfectly well and went on dancing.

One man named Turiyo threw his feather head-dress on the big fire that was burning. One could smell the feathers burn and everyone saw it. He walked around and began looking about and there was the same feather head-dress on the ground.

They would do these things when they got ready to put the fire out, singing the Chungichnish songs and dancing. They wore no clothes but the feather head-dresses and breech-cloths, but they were painted with white clay and black charcoal on their backs to protect them from the heat.

They put the fire out by witchcraft. They would have a very big fire, "as big as a house," and when they got ready to put it out several of the old men would jump right into the middle of the fire and stand there several minutes. You could smell the feathers burn and know that they were burning, but they would jump out again unhurt.

This was not so very long ago. Everyone knows about it. These were the things they taught the boys to do.

The Paha would superintend the putting out of the fire as he did everything else, calling out: "Come up to the fire. Don't be afraid. Don't shirk."

They put the fire out by pulling the burning logs out and stamping on them and putting them out by witchcraft. The chief would not let anyone come near with water, as the hot steam

would burn. They would tramp with hands and feet, and had the Chungichnish sticks. In the early days they would not feel fire.[19]

It is the men of the same village where the boys live who give them toloache; but the next day, perhaps, the people from another village will come; and their chief men will take the boys and teach them their ways and ceremonies, and dance all night long. The men that take the boys to instruct them will talk to them and tell them how they must behave. These men bring the dancing feathers, tukmul, and other objects belonging to Chungichnish. During the time they are teaching the boys and giving them presents of the feathers and objects, the fathers and mothers of the boys give back the same value in baskets and other possessions.

Then the instructors dress the boys in the feathers, paint them all over, give them the wonder-working sticks, and go home.

Next day the men of another village come and do the same thing, and so on for four or five days, different parties coming and going.

The boy has to fast from salt and meat for two or three weeks.

Then they use Wanawut, and the boys all jump. (The account of the rope ceremony is given below). If anyone should fail to do it rightly he would not live long. When he comes through this he is free. He joins Chungichnish. (The narrator stood and reverently pointed upward. "The spirit is always sent up.") They have Wanawut for long life, and the boys must believe in it, and obey the rules.

After the fasting is over, they make the sand-painting. (The description of this is also given below.) The instruction is then given in the proper rule of life for the initiate, the Chungichnish rule of life:

No one must eat immediately after rising. They must wait so long that their spirit may return to them from sleep, and then they can eat. In the same way they must not eat immediately upon their return from a journey among the hills. They must

[19] The Diegueños of Mesa Grande had a very wonderful stone, which was used in this ceremony of putting out the fire in the toloache fiesta. It was worn by the chief about his neck, and was placed upon the fire at the proper time to put it out by magic power. It was also used when red hot by the medicine men among their other deeds of wonder. They would hold it in their hands, lick it with the tongue, and so on.

wait for their spirit to return to them. They must not eat before the old people have eaten, and no young person can eat the last of the seed or grain, the harvest of the previous year. This must be kept for the old. A boy may eat deer's meat when he has grown to the height of his father's shoulder and not before. They must eat sparingly and observe all these rules so that they will live long and have sons and grandsons to perform the ceremonies at their death and to burn their bodies. In the old days they lived to be so old that they became like little babies again, and would lie down and die of old age. Now they eat too much, and they have no rules for eating, and they die young.

They must be kind to the old and not turn their back upon a stranger when he comes to their house. They must not whip their children, for the spirits will be about and will steal their spirits away so that the children will die.

A bath must be taken every morning.

There were many other rules pertaining to the rites and ceremonies and the requirement of secrecy.

If any of the rules were disobeyed, Chungichnish would send the bear, mountain lion, or rattlesnake to bite, and stinging weeds to injure the transgressor. Sickness would come upon him. The earth would hear, and the sun would spy out the guilty by day and the moon by night.

Sage seed ground and mixed with salt is made into a lump, and with this the chief touches the forehead, shoulders, breast, knees, and feet of each boy in turn, telling him that whenever the sun rises he must make the sort of invocation used at this time, sending his spirit towards it,—in an indescribable sound, for which we have no word. Three times this is done,—Ugh-ugh-ha-a-a.

The lump of sage-seed and salt is then put into the mouth of the candidate, who bends over the sand-painting, kneeling before it with arms extended one on each side of it. He spits the lump into the central hole, which is then carefully covered by the old men, who obliterate the sand-painting by pushing it from the circumference towards the center. (See again the special account of the sand-painting below.)

This ends the first part of the toloache ceremony. It is probable that a race was made by the boys and that a rock was painted as is described in the account of the ant-ordeal, and in the girls' ceremony; but my authorities did not mention this here.

The chief has to take care of those who are under him, and he must save all he can in food and valuables and plan to finish the whole ceremony, notifying his people when it is time to burn the sacred enclosure, which is done four or five weeks later to end the Mani.

The sacred enclosure (Luiseño, wamkish or hotahish;[20] Spanish, casa grande) is made in a circular form of willow and other brush. The ceremony of burning it is performed in the day time. First the Paha takes the food collected by the chief and distributes it among the different houses to be prepared for eating; then when all is ready he brings it to the main place, where they have a feast.

Instead of burning the whole of the sacred enclosure, a part of the brush is taken from it and this is burned while they dance and sing the appropriate songs.

This ends the ceremony of Mani which came to the mountain people from San Luis Rey. They do not have it regularly, perhaps every two or three years. During the march which ends the ceremony the mothers of the initiated boys throw away baskets and other valuables among the guests.

The following comments on the toloache fiesta are by Salvador Cuevas: Mani was a training for boys. In it they were told how to act in all ways, to old people, to be kind to strangers, not to eat too much, so that they could run miles and miles, and could live long. They were instructed how to dance and how to perform the ceremonies.

Part of the ceremony Salvador hesitated to describe as it was too sacred to be told; but having confidence in me he was willing to do so if I would promise not to repeat it to the Indians. He was willing that I should give it to the white people.

[20] Vanquech as given by Boscana, pronounced Vankesh, is closely allied to Luiseño wamkish, v and w being more nearly alike than in English. The Diegueño name is awa-iku.

Hotahish, brush enclosure at mani; wamkish, the space enclosed.—S.

WANAWUT, THE SACRED NET.

Wanawut, or Wanal Wanawut,[21] one of the First People born of the Earth-mother (fig. 1), is made of milkweed twine in the woven meshes of which three round flat stones, brought from the seashore, are inserted at intervals in a straight line. This was fastened with stakes in place in the bottom of a trench, and the men who laid it down must stand facing the north, since those who laid the dead Ouiot[22] down did so facing in that direction.

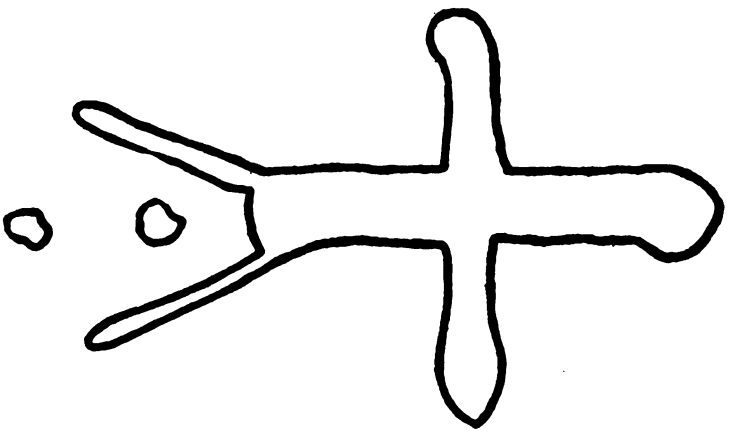


Fig. 1.—Wanawut as sketched by Salvador Cuevas.

Three days after the taking of the toloache the trench was dug and wanawut placed in it. The trench was about five feet long, fifteen inches wide, and twenty-eight inches or so in depth.

According to Salvador Cuevas, a cross trench was dug to accommodate the arms of the figure which would thus be as long as the trench. According to Albañas, there was only one lengthwise trench, the figure, slightly different in shape, being small enough to be included within it. The latter is possibly the more modern form.

When the wanawut is laid down, the chief explains the sacred symbol and gives instruction to the boys in the things pertaining

[21] Wanawut, object of twine used at puberty ceremony. Three stones were employed with it, but wanawut means the twine only. Wanal, a long net for rabbit drives; a seine for sea-fishing.—S.

[22] See the creation myths given below.

to the spirit. The boys, crouching with feet placed one on top of the other, spring from one of the stones to the other, holding and swinging by the sides of the trench and so out. If they are very small they are assisted in this by their "sponsors." The mothers stand by anxiously awaiting the result, for if a boy should slip and fall it would be a sign that he was not to live long.

Albañas explains more fully the symbolic meaning of this figure:

Wanawut is the symbol of the Milky Way, the Spirit to whom our spirits go when they die. Since the spirit cannot be seen, some symbol of it is required for the instruction of the candidates. This figure is shown to them and explained. Piwish, the Milky Way, was put up where he is as a sign that we are only going to live here for a little while. Death came from Ouiot; but when we die our spirit will be sent to Piwish Ahuta. This rises with Nükülish, Antares. The symbol wanawut was to remind the boys of the spirit. "This will hurt you if you do not obey—the ceremonial law." The main wanawut would be in the sky, but we do not see it. We send our spirits to it in breathing, groaning invocation.

The main idea connected with this object in regard to the spirits of the dead seems to be the wish to free them from the earth, to keep them from returning to it; to "tie" them to the four quarters of the sky; to send them to the Milky Way.

The Milky Way glows brilliantly in the clear atmosphere of Southern California. It is there a much more imposing spectacle than it ever appears to the dwellers in the east. The ethereal quality of it, its vague outline and uncertain luminosity, make it easily an object of veneration.

Wanal wanawut is a double term, wanal meaning an object of string for ordinary use, and wanawut the sacred symbol made of string to which the term for spirit is applied because it symbolizes the spirit. Whether the idea of "tying" the spirit to the four quarters of the sky, especially the sacred north, is the reason for this symbol formed of elaborately woven twine; whether the shape of the wanawut is in some resemblance to the human form, or to a portion of the Milky Way; whether the placing it in the trench signifies the depositing of the ashes in the grave; what the three

stones mean; whether the jumping of the boys from stone to stone and out means the escape of the spirit from the grave;—all these and other suggestions of the same sort must be left to speculation as I have had no definite explanation of them.

It is probable that little is remembered of the instruction in the things of the spirit which was given to the candidate in the toloache ceremony; but it is certain that in the old days a definite and well understood system of religious thought existed among those who alone were entrusted with the complete knowledge of the sacred mysteries.

THE SAND PAINTING.

The sand-painting was first done by Tukwut, Iswut, and Mesmal Awawit,[23] Mountain Lion, Wolf, and Sea Fog. They were people and great medicine men, and were the first to institute Mani. It was after Ouiot died that they made all the rituals and ceremonies.

The sand-painting was used in four ceremonies: Mani, the toloache ritual; Wukunish, the girl's ceremony; the ant-ordeal; and in Unish Matakish,[24] the ceremony for burying the feathers of a toloache initiate when he died.[25]

Since my authorities differed concerning it, it was with difficulty that I obtained anything like a complete understanding of the sand-painting; and it was not until all my notes were collated and compared that I decided that the main reason for these differences was the fact that some of the old men were describing one form of sand-painting and some another; that those were wrong who maintained that the girls' and boys' sand-paintings were alike; that there were in fact two forms of which one only was distinctly remembered by most of them.

The only alternative is to imagine that different practices prevailed in this matter in the old days.

As all were agreed concerning the sand-painting used in the girls' ceremony, this will be first described.

[23] Mesmal, mist, fog; awa'vit, fog.—S.

[24] Yunish, burying of an initiate's ceremonial feathers; matakish, grinding stone.—S.

[25] It will be seen that these are all connected with the idea of initiation. —Ed.

A central hole is dug, and the sand removed from it is taken to make a heaped-up circle about two feet in diameter, the width of the heaped-up border being about three or four inches.

This circle is then painted by sprinkling it with different colored sands or ground paint and powdered charcoal. The outer edge is made white, the middle red, the inner edge black.

The central hole is defined in the same way, white outermost, red in the center, black nearest the hole.

Three concentric circular rows of nine points each[26] are made pointing outwards from the central hole; the outermost row of points are white, the next circle of points red, those nearest the hole black.

A sand-painting was made for the author, which is shown in plate 2. For convenience in photographing it was done chiefly in white. The outer enclosing circle, however, shows the red and black.

According to one authority the three circles forming the circumference mean, the white outer one the Milky Way; the red central one, tukmit,[27] the sky; the black inner one, chum kwinamul,[27] our spirit. According to another, the outer circle of white is the Milky Way; the middle of red, chum towi[27] our spirit; the inner of black, kwinamish,[27] the spirit. Another gives these as chum towi, chum wanamul, chum kwinamul, all meaning our spirit; the central one referring to the Milky Way, which he places in that position, making the white circle central and uppermost. Wanamul seems to include the stem which is found in wanawut, as if spirit and Milky Way were synonymous.[28]

The sand-painting represents the world. The sky bending above is supposed to rest upon the circle of the Milky Way. The whole of the visible universe is thus represented.

[26] The design may also be imagined as consisting of nine pointed figures of the form of a Gothic arch, intersecting, and surrounding the central hole. —Ed.

[27] Tukomit, night, also the first 'man' made by Kyuvish Ataxvish (x German ch); sky, tupash; Towish, spirit, corpse, cham-towi, our spirit. Cham-kwinamo, our spirit, root, or origin, from kwinamush, which really means root, and is used in speaking of the root of a plant or the origin of a person.—S.

[28] To most California Indians the Milky Way is the spirits' or ghosts' road.—Ed.

All the authorities but one maintain that there is a "door" to the north to allow the escape of the spirit. The informant who denies this has either forgotten, or he belongs to a line of descent, a 'clan,' in which the ceremony was modified.

The gate towards the north is shown in the photograph. The Earth-mother lies with her feet to the north.[29] Those who laid Ouiot on the funeral pile stood facing that way. All ceremonies and invocations are performed facing the north.

In the outer circle of points or diamond-shaped divisions, in the second one from the door, is a small circle of sand. This represents the sea, which according to one version of the creation myth, gives us the breath of life which fills our lungs.

In the next division is a small heap of sand; this is kawima hulwul, that is, the little hill of hulwul,[30] the sacred Chungichnish plant that grows on the hills, which punishes the transgressor; how, it is not known.

In the sixth division, counting in the same direction, is a larger hill combining the meaning of four Chungichnish avengers: sowut, hunwut, tukwut, iswut, that is, rattlesnake, bear, mountain lion, wolf.

In the middle circle of points, in the fourth division, there is another small heap of sand. This means mukil, boil or abscess, which is a Chungichnish avenger and sent to punish those who do not fast for the appointed time, or who secretly steal meat or salt during the fast.

The name of the sand-painting is eskanish tarohayish, a double name. Eskanish means any kind of images or figures, and after the habit of Luiseño double terms is qualified, as it were, by tarohayish which means this particular kind of image. It is also called nahish.[31]

Into the central hole of the sand-painting, the girls spit the lump of sage seed and salt at the conclusion of the ceremony. In this hole also are buried the feathers of the toloache initiate

[29] Cf. Journ. Am. Folk-Lore, XIX, 312, 1906.

[30] Kawimal hulval, hulval hill; hulval, *Artemisia californica.*—S.

[31] Mr. Sparkman gives the same interpretation of eskanish and tarohayish. For nahish he has nawish, marking, writing, painting, from the verb nawi.

after his death. The hole in this case must be made larger. In the girls' sand-painting the hole is about four inches in diameter.

Salvador is the only one who gives a different sand-painting for the boys' ceremony (fig. 2); the others think it differed only in being of a larger size.

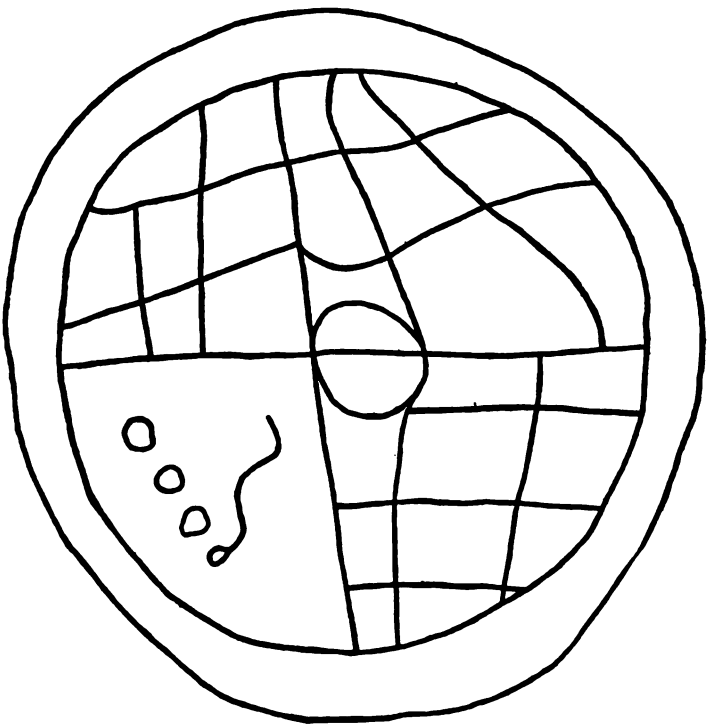


Fig. 2.—Sand-painting for boys' initiation as sketched by Salvador Cuevas.

Salvador is probably correct. He drew both for me on pieces of paper and explained them as well as he could. The circle in the boys' sand-painting is about as large as a wagon wheel, and is divided in quarters, three of which are marked off by lines into nine divisions each; the fourth being empty except for the figure of a rattlesnake and three round figures meaning the flat baskets, tukmul, which belong to the men and are sacred to Chungichnish, being placed on the ground in every ceremonial, containing a little grain.

The divisions of this painting are said to be in various colors, made with powdered yellow bark, white and red clay, and other paints, yellow, green, white, blue, and red.

This painting represents the earth, the colors symbolizing flowers, fields, and trees.

THE ANT ORDEAL.

Another almost prehistoric ceremony was that of Anut,[32] called Antish[33] or Tivihayish, used as a sort of supplement to the toloache initiation, as an education in courage, skill, and quickness for young men. It has been so long discontinued that it is impossible to obtain a complete description of it. It was not performed every year. Sometimes there were many candidates, sometimes very few.

The sand-painting was used in this ceremony, which is one of the four in which it was employed. The first night of the ritual they did not sing or dance; but they had something they whistled with all night long.

The chief would select the young men when they were old enough to endure the ordeal. It was done secretly in a place apart. A certain cone-shaped hill with rocks on top was one of the places where they used to perform it.

Early in the morning before dawn the youths would be taken into the house or sacred enclosure and given hot water to drink.

The chief had a basket in which he collected ants; and one by one the candidates were taken to the place prepared and made to lie down while the ants were shaken out of the basket and over their naked bodies with a certain sort of plant. To this a song was sung: "Toma no kwato."

After a time the ants were whipped from the body with nettles. When all was over, the sand-painting was made as in the toloache fiesta. The lump of sage seed and salt was also used in the same way. This implies that there had been a previous period of fasting. Invocation was made three times by the indescribable

[32] Anut, species of large red ant, regarding which there are songs.—S.

[33] Antish, the action of lying on an ant hill and permitting one's self to be stung, which was thought to be beneficial; anti, verb, antish, action of same.—S.

solemn groans and gestures; then the lump of sage-seed and salt was placed in the mouth of the candidate and spit into the central hole of the sand-painting.

A race was then made by the candidates, probably similar to the races made at the time of new moon; and the winner of the race painted the rock in the designated place, with red and black paint.

After this came the dances and songs of Anut, four or five of which are remembered, sung to the accompaniment of the ringing stones.

A ceremony for tattooing was somewhat similar, but no definite account has been obtained of it; and the songs belonging to it have been forgotten. They had a ceremony for it and would lay the person down in a certain place. Those who performed the tattooing were obliged to fast previously for a certain length of time.

Both men and women were tattooed. One of the old chiefs had a mark on his left wrist; another of the old men had the tattooing on his nose. The meaning of the marks could not be discovered.

THE CHUNGICHNISH CEREMONY OF UNISH MATAKISH.

The sand-painting was used also in the ceremony of Unish Matakish,[34] the burying of the feathers of a Chungichnish initiate.

When a man died who had drunk toloache in his youth, if he still had in his possession the feather head-dress, sacred stick, paviut, and other ceremonial implements, the chief of his "party" or clan would go and get these objects and bury them.

Many of the features of the toloache fiesta were repeated.

The chief calls the people, and gets out the tamyush and all the sacred objects. He cleans the tamyush—they are buried in the ground when not in use—and paints them and sets them all together. They have two places, as in the Mani. In one place they prepare these things; and in the other they make the sand-painting. This has a gap to the north, and the rattlesnake is

[34] Yunish, burying of an initiate's ceremonial feathers; matakish, grinding stone.—S.

painted near the gap. Tukmul, the winnowing basket, is represented in the painting, too. It is Chungichnish.[35]

After everything is ready, the Paha calls out three times; and they come marching and singing a solemn recitative. The chief who made the sand-painting takes the feather head-dress, and the other things to be buried, in his hand, and goes ahead of the others as they sing the Chungichnish songs which mention the stones and sacred objects, always ending with tamyush.

They sing as they reach the main place where the sand-painting is. The feathers and objects are placed in the central hole of the painting, and are buried by pushing the sand slowly forward, obliterating the painting and filling the hole at the same time, to the accompaniment of a recitative invocation.

The Chungichnish songs, sung at this ceremony, are not subject to the law of clan ownership, but may be sung by all, as they do not belong to any one family or party. No one composed them. They were made and given by Chungichnish himself.

WUKUNISH, THE GIRLS' CEREMONY.

The girls' ceremony, Wukunish,[36] was the initiatory ceremony made for the girl upon her entrance into womanhood.

The father of the girl would have to inform the people of her condition and call them together, naming the girl; and he would ask the chief of another "party" (clan), or of another village, to conduct the ceremony, putting it entirely into his hands and doing nothing himself except to provide the food and presents for the assembled people and invited guests. Baskets, strings of shell-beads, and sivut paviut, the sacred stick with flint in the end, had to be given away in every ceremony to those coming from a distance to assist. These were the same as money and were used in this way before they had any other sort of money.

The chief would call out three times in invocation and mention the name of the girl.

[35] This description evidently refers to the form of boys' sand-painting given by Salvador Cuevas.

[36] Luiseño, ashish, menses. Mr. Sparkman gives wekenish, girls' puberty ceremony; ashish, song at this ceremony; ash-k, undergo first menstruation. The Diegueño call the ceremony A-kil.

The girl, or girls, if several, would be seated upon the ground, and in front of her would be placed a big basket three feet or so in diameter, containing feather head-dresses, feather skirts, the sacred stones wiala, large quartz crystals, and possibly others.[37] The chief, taking some tobacco in his hand, would powder it in his fingers, at the same time rolling it into a ball; and kneeling in front of the candidate would make the indescribable sound of invocation with curious forward motions of arm and body three times repeated, the third time placing the ball of tobacco in the girl's mouth. Warm water was then administered in a basket, chilkwit.[38] If she should vomit, it was taken as a sign that she had not been virtuous; but if she were good she would not vomit. This was a severe test.

The tobacco induced drowsiness, and in this state the girl was placed in a large hole that had been previously dug in the ground and heated by a fire and when sufficiently warm lined with green boughs and covered with brush. Two sacred plants were used for this purpose, nenaxel pachayel (double name), sumac and a kind of sedge.[39] The names of these two plants are always given together in a double term in the list of the First People.

The girl is placed there for three days. Only her mother or the wife of the chief can see her and attend her. A basket, chakwit, the sort men carry on a staff over the shoulder, is put over her face to keep the flies off; and a new tightly woven basket cup, chilkwit, is used to give her water to drink. She can drink only warm water.

As she must not touch any part of her body with her hands, two small sticks are allowed her with which to scratch herself.

In very ancient times, instead of these sticks small oblong pieces of stone or abalone shell, pierced with a hole at the larger end, were fastened by a string around her wrist loosely enough for convenience in handling; and with these she might scratch her head or body.

She must lie perfectly still, and in the day time she may rise slightly from a recumbent position while the attending woman

[37] See H. N. Rust, Amer. Anthrop., n.s., VIII, 28, 1906.

[38] Chilkwut, basket hat, also used as cup.—S.

[39] Nenexyal (x German ch), tussock-grass; pachayat or pachayal, a coarse grass or sedge.—S.

arranges her hair, then lie back in the same place and keep motionless.

At night the men dance around the place where the girl is, singing the ashish songs to the accompaniment of the ringing stones. In the day time the women dance and sing songs different from those of the men. This will be kept up constantly for three days, a second village coming and continuing the ceremony, and so on. A men's ashish song is preserved on phonograph record 397 of the University of California. It begins: "No ashwo, I am menstruating."[40] One man sings this while all the men dance. The song mentions the mountains that were First People: San Bernardino (Gray-head), the older brother; and San Jacinto, the younger brother; and all the other places, the hot springs, and the mountain ridge where the first ceremonies were held after the death of Ouiot. The mountains were placed all around to keep watch, and spy out things,—ceremonial sins.

A women's ashish song, University of California record number 395, mentions a series of places ending at Elsinore. It was here that Kauko and Chihemel first had menses. When the first ceremony of this sort was over, they felt happy and composed this song. This is the last song of the ceremony. It mentions the travels of the First People from Katuktu to Kalaupa and then to Elsinore.

Another ashish song, sung by Martasal Tabac, is on University of California record number 414. This mentions the man who leads the hunt. There are a great many of these songs which properly belong to the girls' ceremony, but they are also sung in the Image ceremony.

A second song on this record was given by the same man in illustration, though it is a women's ashish song. The songs of the men and the women are different, and the men never sing the women's songs. This song mentions a hill to which the girl runs at the conclusion of the ceremony, when a rock is painted.

Another song of this ceremony is on record number 410 University of California, also sung by Martasal. This mentions the deer when he tried to escape from death. He sent his spirit north, south, east, and west, but death was everywhere. He could

[40] Non ashk, or non ashka, I am menstruating the first time.—S.

not escape. Blue-fly and Buzzard followed him and killed him. This is in reality a song of the ant-ordeal, but they sing it in the girls' ceremony, though it is different from the regular ashish songs.

The kwinamish songs of the spirit are sung in the girls' ceremony as the second series in that ritual.

After three days of constant singing and dancing day and night by men and women, the girl is taken out and the wife of the chief paints her face. Hair bracelets and anklets are placed upon her hands and feet; and she is decorated with a necklace of pieces of mica.

She must not eat meat or salt for a month; and must drink no cold water for a year. She may voluntarily continue the fast for two or three years. At the conclusion of the month of fasting, the sand-painting is made upon the ground by the chief, and instruction given as in the case of the boys.

A lump of ground sage-seed and salt is made, and with this the chief touches the girl's head, shoulders, arms, breast, knees, and feet, placing it at last in her mouth. He must do this facing the north and after walking three times around the sand-painting and making invocation to the north. She then kneels in front of the sand-painting, and with a hand on each side of it bends and spits the lump into the central hole, which is then covered by several men who sit around and push the sand with their hands from the circumference to the center, obliterating the painting and covering the hole at the same time.

A race is then made by the women and girls, and this ends the ceremony. They run to the appointed hill, where the wife of the chief paints the girls' faces red, black and white, and scraping some of the paint from their faces uses it to paint the rock in certain designs (Pl. 4). The face of the girl is painted each month in a different design, and corresponding marks are made upon the rock. This is done for four months, after which she may paint her face as she chooses. The hair bracelets and anklets which she has worn are taken off and deposited upon the rock at the time when it is first painted.

SACRED CHUNGICHNISH OBJECTS.

The Chungichnish worship was a religion of fear. When the people sent the sun, Temet, into the heavens, he was to watch the people as Tukmit,[40a] the Sky, also watches them, to see if anyone does wrong, such as stealing food during a fast. The North-star was also put there to watch and spy out everything. It is like our spirit.

The moon, Moyla, was sent up there to look out for everything. In the day-time the Sky and Sun watch the doings of men; and in the night the Moon does this, so no wrong doer can hide himself, for when one goes the other comes. They keep changing places.

The people were afraid of the sun because he watches everything, and they made it a rule always to eat before the sun rose in the morning.

Chungichnish still punishes, or did so lately. The Yapiche people went to give toloache to Pio Amago, the last Indian who took, it, who lived at La Jolla. Then the Potrero people began the dancing. It was not their place to do so, and it made the others angry. Chungichnish saw that the ceremony was not being properly performed. Suddenly the leader of the dance fell to the ground in terrible pain. The father of Salvador Cuevas was there and he was a medicine-man. He went to see what he could do. When he examined the man he soon found out that the people were so angry at him that he had got sick and that Chungichnish was hurting him. They must come and be friends and he would get well. So they had a big talk, and made up, and the man got up and became well.

Tourmaline was used to cure a man punished by illness by Chungichnish. It was rubbed on his body. But if anyone unauthorized touched it, he was punished.

All of the things mentioned as First People[40b] were sacred to Chungichnish. There were many other things not remembered or not given in the list of them obtained. Tukmul, the sacred winnowing basket, has already been described.

[40a] Tukomit, night; tupash, sky.—S.

[40b] See lists given in the Creation myths below.

The sacred stick, Sivut paviut,[40c] was brought from one pueblo to another in a ceremony, and served the same purpose as money, being given in return for presents of food. These sticks were painted red, white, and black. The old Diegueño chief, Cinon Duro, had one of these from Rincon, one from Cahuilla, and one from Hot Springs, long since lost.

The feather objects were sacred: the feather head-dress, the eagle-feather skirt, and the feather band or "rope," Luiseño tuminet,[40d] mentioned in the Diegueño story of Chaup. Of the only specimen seen by the author, one part is in the American Museum of Natural History, the remainder at the University of California, where it is number 1-9580 in the Museum of the Department of Anthropology (Pl. 3). This portion, very old and much worn, is in three pieces, aggregating a total length of over seven feet, the longest single piece being five feet, with an average width of seven to eight inches. It is made of black feathers, four to five inches in length. The base of each feather is stripped to the quill for an inch and a half. The feathers are laid alternately, pointing in opposite directions, and sewn together through their bases with two threads. The backs of the feathers are all on the same side, thus giving a uniform appearance to both the front and the back of the band.

The ceremonial use of this feather band is now uncertain. According to the interpreter, this particular specimen was used in latter times in the cure of men punished by Chungichnish with sickness. Those performing the ceremony all took hold of it. Each one would then take a piece cut off from the band and put it in the fire during the ceremony. This was probably on account of its inherent value as an ancient Chungichnish object, and not because it was designed for use in that way.

Venegas, quoting Father Torquemada, describes in the Island of Saint Catherine (Santa Catalina) an Indian "temple," "a large level court, and in it was a large circular space with an inclosure of feathers of several birds of different colors, which I understood were those of birds they sacrificed in great numbers.

[40c] Paviut, stick with crystal inserted in one end, and having a ceremonial use; shi'valum, sea shells; perhaps sivut or shi'vul denotes pieces of shell glued to the paviut.—S. The Diegueños call it Kotat.

[40d] Tuminut, wide feather band slung over shoulder at tanish dance.—S.

Within the circle was an image strangely bedaubed with a variety of colors . . . holding in its hand a figure of the sun and moon." Two tame ravens were within the circle; and when the soldiers killed them the Indians fell into an agony of fear.

It does not seem at all improbable that this is evidence of a form of Chungichnish worship in one of "the islands of the ocean" from which it originally came. The feathers used as an "inclosure" may have been made exactly like the object in question which my interpreter called a "feather rope."

The raven is the sacred Chungichnish bird, his messenger and spy.

Among the Diegueños, when the raven flies overhead he caws and says, "I will kill you." Then the medicine-men would smoke their stone pipes, and blow the smoke in invocation three times upward, saying, "Please don't kill us."

Among sacred objects were classed various forms of smooth round pebbles brought from the seashore, and pieces of crystal colored with lithia in tourmaline formations.

MOURNING CEREMONIES.

THE IMAGE CEREMONY.

Both the Luiseños and the Diegueños have had a commemorative ceremony for the dead from early times; but with what tribe the manufacture of images made to represent the dead person originated, must be matter of speculation.[41]

The Luiseño ritual is especially complete in the exactness with which the song series are performed; and the Chungichnish worship may be said to be founded upon the thought of the spirit, embodied in such abstractions as Wanawut, Chum Towi, Kwinamo, all of these being different words to express either the spirit of man or the spirit above.

The following account of the Image mourning ceremony is given by Lucario Cuevish:

When people die, the chief will collect food and valuables and notify the other leading men that he is going to have the Image dance. The others make ready to perform the ceremony. One chief out of four or five parties will do this, and the others will assist.

They sing all night long, then go off to a place a little distant to make the images, for this is not done before everyone. The images are dressed as in life. In old days the women's figures would be clothed in the short skirts of fringe made from elders or willows. Hair is put upon the head. The eyes are made of abalone shell. Nose, mouth, and sometimes ears are made.

When all is ready at this place, the chief goes to the main place of the ceremony and digs as many holes as there are images to stand them in. He first calls out three times and the others answer him; then, carrying the images, they march to the sacred enclosure of brush, singing the solemn recitative: "Towish chokya, the spirit appears."[42] They stand the images in the holes

[41] Mourning ceremonies with images to represent the dead are not confined to Southern California. Professor Dixon has recently described an elaborate form in his "The Northern Maidu," Bull. Am. Mus. Nat. Hist., XVII, 245, 254.—Ed.

[42] Towish, spirit, corpse, 'devil'; choxya (x German ch), perfect tense of choxi, to be born.—S.

while the women among the relatives place gifts of valuables where they can be accepted by those performing the ceremony, who sing the songs of Tochinish,[43] the Image ritual, while standing near the images.

The men and women of the visiting party have their faces painted, but the relatives do not paint or sing or take any part in the ceremony.

The singing without dancing goes on for a certain length of time. Then the chief takes a whirling-board, or bull-roarer, mumlapish.[44] Instead of telling them to stop singing, he whirls the board three times. The images are then again lifted up, and carried back in procession to the more distant place. The dancers now paint themselves and put on the feather head-dresses. The whirling-board is swung again as a signal, and they come again carrying the images and marching around the sacred enclosure, bringing the turtle-shell rattle.[45] In the sacred enclosure they dance to a long series of songs.

Then they burn the images, sometimes burning the clothes and decorations with them; but the visitors have the right to take off the clothes and keep them, the relatives furnishing others for the burning. While the images are burning, the men and women dance around the fire singing Sungamish,[46] the finishing songs. Other songs called Topasish[47] are sung while only the men dance. They sing one or two of these songs and half a dozen or so will dance.

A whirling dance with an eagle-feather skirt is danced at this ceremony. They sing and dance all night, and may end the ceremony by noon the next day.

The songs of Pikmakvul,[48] death, are sung while they burn the clothes, and during the burning they have a recitative de-

[43] Tauchanish.—S.

[44] A flat disk of wood attached to a string and whirled in the air to make a dull humming sound, still used at Mesa Grande. Mr. Sparkman gives momlaxpish (x German ch).

[45] Paiayut; paiala, turtle. (Paayat, paila.—S.)

[46] Shangamish, songs, also a dance, at the ceremony at which clothing is burned.—S.

[47] Tapa'sash.—S.

[48] Pi'mukvul, death, also songs at mourning ceremony; pi'mukvul is singular past; pi'makish, singular present.—S.

scribing the burning of Ouiot. This recitative tells how thin and sick Ouiot grew. Every song of Pikmakvul tells about Ouiot, and they change from one to the other.

Then they march around the fire carrying some of the possessions of the dead person, and burn these things, telling how the First People burned Ouiot. Many dance and a few carry the things. Then they stop and sit down for awhile.

They now make an invocation to the sky three times, breathing, groaning, indescribable sounds, and put the things on the fire. They sing: "No towi, no towi, my spirit, my spirit." These are the songs of Chum towi, our spirit. They sing two or three of these songs while they burn the possessions of the dead. Then they stop. The relatives bring out baskets and valuables and those performing the ceremony divide them among themselves.

When all is over they sing the songs from the most important song series, as follows:

First are sung the songs of Pikmakvul, the Ouiot songs of death.

Then some of the series called Temenganesh, songs of Seasons.

Then some of the series called Chum towi, our spirit, the same as Kwinamish.

Then some of the series called Kamalum, our sons or children, mentioning the children of the Earth-mother, the mountains that were First People, and so on.

Then follows the series called Kish, the house, about the house of the dead man. There are only a few of these.

Then some of the series called Anut, the ant, which was used in ancient times as an ordeal in a sort of sequel to the toloache ceremony to train the young men.

Then some of the series called Nokwanish,[49] songs in memory of the dead. The little rabbit, Tovit, was the first man to sing in the original ceremony for the dead when they burned Ouiot, so they sing the Nokwanish songs which the rabbit sang.

Then follow some of the series called Totowish.[50] These mention the spiders, rattlesnakes, and the sun, the avengers of Chungichnish.

[49] Nokwanish, general name for men's songs.—S.

[50] Totawish, a dancer of the morahash ceremony.—S.

Then some of the series called Munival,[51] songs of places or landmarks.

Last of all are sung some songs from the series Nyachish, song of the people, in which they load their enemies with indecent epithets and allusions. Family feuds or small fights arose chiefly from land claims. They seldom or never had wars or battles as we understand the words. Each man in the mountains would have a patch of oaks, perhaps a hundred acres or so, and no one else was allowed to go there and gather acorns. Fighting arose over this. So they sing against each other. Even the women sing these songs.

This ends Lucario's account of the Image fiesta.[52]

THE NOTISH CEREMONY.

Another form of the Image mourning-ceremony was known to the Luiseños as having been in use among the Indians of the north; and, though never performed among the mountain Luiseños, it was celebrated at least once at San Luis Rey, for Lucario Cuevish remembers to have seen it there.

Salvador Cuevas, who never saw this form of the ceremony, gives the sacred basket pole as one of the children of the Earth-mother, sent by her to the north.

This ritual for the dead was called Notish[53] or Kutumit.[54] The chief feature of it was a tall painted pole called Kimul Chehenish,[55] made very smooth from the trunk of a pine or fir, which was hung with baskets at the top to be reached by climbing

[51] Monival, verbal noun from moni, to go, come, journey; denotes past action of verb, tracks, where something passed; there are songs of monival, where one's ancestors traveled.—S.

[52] According to the Diegueños, the Mohave people first made mourning images at Wikami, a wonderful mountain, level on top, where all the religious ceremonials originated. Humkahap, the Mohaves, were the youngest, that is, the last made of the related tribes, and always stayed in the home place.

The Diegueño Image ceremony has been briefly described in the American Anthropologist, N.s. VII, 625, 1905.

[53] Notush, ceremony when things are given away.—S.

[54] Kutumit, pole erected at notush; objects are hung on it.—S. Kotumut, pole at San Fernando described by C. Hart Merriam (unpublished account).

[55] Kimal, small house, diminutive of kicha, objective kish, house; chehenish, objects hung on kutumit; no doubt derived from chehe'i, to appear, show.—S.

as a contest of skill. This pole was as high as a house and was painted with different colors. It represented the dead man, the spirit. Different parts of the pole were painted in different colors to refer to the different parts of the body. The pole was not painted with the shape of a man, but one part of the painting meant the knee, another the arm, and so on. The top for the head was always painted white.

On top was fastened the dressed skin of a crow or raven, the same they laid on the breast of Ouiot when they burned him. When the pole was set up they danced and sang.

Notish was a more elaborate form of the mourning-ceremony, in which it was necessary that great stores of food should be provided, and different villages were invited to participate. Contests of skill were a feature of the occasion. The simpler form of the Image ceremony can be performed by one village alone.[56]

[56] The Notish ceremony is referred to below in the third of the myths given.

CEREMONIAL SONGS.

Among the Luiseños the relation of ceremonial songs to distinct series with special meanings and uses can still be clearly traced. The most important of these series were used in the Image ceremony, as has been stated above. The complete list, as far as obtained,[57] may be given as follows:

Pikmakvul series, songs of death.

Temenganesh series, songs of seasons.

Chum Towi or Kwinamish series, songs of the spirit.

Kamalum series, songs of the First People.

Kish series, songs of the house.

Nokwanish series, songs in memory of the dead.

Totowish series, songs of the Chungichnish avengers.

Munival series, songs of landmarks.

Nyachish series, songs of people cursing their enemies.

Anut series, songs of the ant-ordeal, now used in other ceremonies.

Sungamish, the finishing songs.

Topasish, men's dance songs.

Then the songs of the individual for lesser ceremonial occasions, shaman's songs for rain-making, for fair weather; for harvest; for good luck, doctoring; bad luck, death to enemies; for deeds of wonder as instruction to boys, and so on. These include songs of Chatish, songs of Numkish, songs of Tuknish, all of which are Chungichnish songs.

For the benefit of the special student who may be interested, a description of those obtained on graphophone records follows:

Record 369.[58] Song of Temenganesh, Songs of Seasons. The words as spelled by José Albañas or Albañez, the singer, in Spanish orthography, are: Achonacua tuganecancua a guanaguot,[59] etc. This song means: "All these I have mentioned and Wanawut. I have mentioned all the names of the seasons and stars

[57] See also the preceding account of the Image Ceremony.

[58] Unless otherwise mentioned, numbers refer to the collection of phonographic records in the Museum of the University of California.

[59] Choun, all, everyone; tungani, to give name to; -kwa, suffix, then; wanawut.—S.

and Wanawut. I am proud of my songs. I have believed in my songs." All danced as they sang this song, which is part of the second series in the Image ceremony.

Record 370. Song of Temenganesh. By Albañas. Luiseño words: Helemocme temenganesh apangaula, etc.[60] This is a women's song. It mentions the water and mud in which are Wahawut, the frog, and Karout,[61] the earth-worm. Wahawut hid away Temenganesh, *i.e.*, frogs disappear and are unheard at certain seasons, and at a certain month come out and begin to sing.

Record 371. Song of Temenganesh. By Albañas. Luiseño words: Yjason noqui son notelaneba, etc. Month of Novoyamul.[62] When Tukmit the Sky grows old. When Tomaiyowit, the Earth, has her menses (the green scum, fresh water algae that appear on ponds). Eagles moult. This song mentions the months[62] Tasmoimal and Taunamal. "What shall I say about my home and about my talks?" Women dance to this song.

Record 372. Song of Temenganesh. By Albañas. Luiseño words: Potoyau yauca anmal, etc. The ant has his season.[63] He has opened his house. When the days grow warm he comes out. The spider has her little house and her hill. The butterfly has her house, pohota.[64] (This word refers to the sacred enclosure of brush made in circular form, in which the religious ceremonies were held.) Wiskun, chipmunk, and also the larger squirrel, yet have the mavakul,[65] (log hollowed out and used for holding acorns. The allusion is to the log which the chipmunk carried when he was one of the First People, a log ten men could not lift, on which they laid the body of Ouiot when they burned it.) The song on the record ends here. The rest of the song is as follows: Atachama,[66] a bird, and another bird are mentioned.

[60] Helimuk, hid; temenganesh, season; panga, in the water.—S.

[61] Karawut, earth-worm.—S.

[62] See the section headed Star Lore and Calendar, below, for a discussion of the "months" or divisions of the year.

[63] Potauyowi yauka anmal, his language has ant.—S.

[64] Po-hota, his or her brush fence, from hotahish, *ante*, enclosure of wamkish, ceremonial place.—S.

[65] Mavakul or mavakush.—S.

[66] Atachimai, a very small bird.—S.

It is time for the eagle to fly off. It is time for the acorns to fall from the trees.

Record 373. Song of Temenganesh. By Albañas. Luiseño words: Memec no asunecua awawik,[67] etc., "I am something doing." This is Nemoimal season. The bear sheds his hair and says, I am fat. The whale, koyowut, now gets fat. The deer grows fat.

Record 374. Song of Temenganesh. By Albañas. Luiseño words: Tomamec uchanat potoblecala,[68] etc. "North the elk has young." In the north at this season uchanut has her young; and pashakut,[69] the elk, has young. In the east pahut,[70] the mountain sheep, and chakla,[71] a desert animal, bring forth young. In the south awawut and tamyasowut bring forth young. In the west the ocean is hunauish,[72] tossing its waves back and forth. In the center, "here," the deer sheds his hair, and the acorn grows fat. The sky "sheds," that is, changes color. The clouds of winter are swept away. Tupush is sky. Nahonit also means sky. Tukmit is the personified sky.[73] This is the season of Pahoyomal, when snakes crawl out, frogs sing, trees are juicy and ready to put out leaves, in early spring.

Record 375. Song of Temenganesh. By Albañas. First part of song: Whaimul piwamul (primeval stage of being, with some reference to the Milky Way,[74]) lies back extended making a humming noise. Second part: I recognized afar off, from the door of my house, Nahut,[75] the stick used to club Coyote,[76] and Kashlapish, the ringing stones used in the girls' ceremony. Third part: I look east. I look up. Look, Nükülish (Antares) rises.

[67] Mimik-mo ashunin-kwa awa'awik, meaning as given.—S.

[68] Tomamik uchanut potovlykala, north where the buffalo is breeding, or, in the north the buffalo his breeding place. Uchanut, a fabulous animal, identified with the bison; tovli, breed, bear young, lay eggs.—S.

[69] Pashakut, elk.—S.

[70] Paut, mountain-sheep.—S.

[71] Chalaka, horned toad.—S.

[72] Perhaps wanauwanahish, verbal noun from wanauwani, to move.—S.

[73] Tupash, sky, nahainit, sky, in ceremonial language; tukmit, night.—S.

[74] See the Creation myths given below. Mr. Sparkman says: Only used in songs and myths; perhaps from whaiahat, white, and pewipwish, gray.

[75] Nahut, walking stick.—S.

[76] See the account of the death of Ouiot in the Creation myths below.

Yungavish (buzzard, Altair) rises. Ahuta (Milky Way) is rising at the same time. Aylucha[77] (Venus) is rising.

Record 376. Song of Temenganesh. By Albañas. Luiseño words: Asguot pela telamoc,[78] etc., "Ashwut was saying." The eagle, ashwut, talked about the stars rising. Kariya[79] Ahuta, rises Milky Way. Antares and Altair rise.—In the west the eagle mentions the things in the ocean.—The singer does not know what these words mean. The Chungichnish worship with its songs was brought to the mountain Indians from the islands of the ocean. He mentions Harasa, Catalina Island, and Kimki, San Clemente Island.[80]

Record 377. Song of Temenganesh. By Albañas. Mulmusña hete pela kamai temet, etc. The sun rose at Mulmus.[81] Antares rose too.

Record 378. Song of Temenganesh. Wunal Pewipwe tiwium,[82] etc. "That San Bernardino mountain see," Sulkul, the fall cricket,[83] said. (Sulkul was the first basket-maker, according to one version of the creation myth.) "Look at Pewipwe; look at (naming all the other high mountains that were born as First People). The acorns are ripe. Look at Pawi Chawima,[84] (Cahuilla); Kupa Kawima,[85] (a hill at Warner's ranch), I'pa[86]

77 Eluchax (x German ch).—S.

78 Ashwut-pila' telamuk, golden-eagle was-saying.—S.

79 Kari'ya, rose.—S.

80 Catalina island: Kimki harasa; San Clemente island: Shoi ponga'; San Nicolas island; Atauki ponga'. I have had much trouble in ascertaining the names of these islands. Some say Kimki harasa is Catalina, others that it is Clemente. Some say ponga' is Catalina, others that it means island. As ponga' is placed after Shoi and Atauki it probably means island. —S.

Kimki is unquestionably San Clemente, and Harasa Catalina. Shoi and Atauki are not referred to by others. Kinki, Kinki-par is the Gabrielino name of San Clemente (present series of publications, IV, 143, 153). Harasa has only been given in the locative form Haras-gna; it occurs in Reid's list of Gabrielino rancherias, but without a designation of its situation (quoted, *ibid.*, 143). The usual Gabrielino name for Catalina is Pimu; Pipimar has been obtained among the Luiseño (*ibid.*, 142, 143, 144, 153). —Ed.

81 Malmusnga heta-pila' kamala temet, at Malmus rose the son sun.—S.

82 Wunal Pewipwi tiwiyam, that San Bernardino mountain see ye.—S. Puwipui, Piwipui, present series, IV, 133, 148.

83 Shulkul, a green cricket.—S.

84 Pawi, the warm spring in the center of village at Cahuilla; Chawimai, probably a valley at Cahuilla known as Duraznos.—S.

85 Kupa, Agua Caliente, kawimal, hill.—S. (Gupa, present series of publications, IV, 148, 150).

86 I'pa.—S.

(Volcan); Naavo Waheto,[87] (hills south and east of Potrero); Malava,[88] (Palomar Mountain)." The song mentions the cold wind of early morning when Antares rises, at the time when all the Indians take a bath. This was the rule. Everyone must bathe daily.

Record 379. By Albañas. After the Temenganesh series comes the Kwinamish series, songs of the spirit. In the Image ceremony the songs of Pikmakvul, songs of death, each one mentioning Ouiot, are sung for six or seven hours; then Temenganesh, Kwinamish, and others. In the Girls' ceremony the Kwinamish songs come second.

First song of Kwinamish. This is like talking to themselves, and sending their spirit to the Milky Way. This song tells of the council the people held after the death of Ouiot, to see what they could do, after they found that there was death. This mentions Yula Wanawut,[89] the spirit of the dead. If the ceremonies are done right, the spirit will be sent off all right, and will not stay in its former abode. In the council they tried to see what they could do about their spirits, and so they arranged these ceremonies. The song says: The Sky, after all these ceremonies were rightly done, felt good in his heart. It mentions the sand-painting, Eskanish Tarohayish.

Record 380. Song of Kwinamish. By Albañas. Tomamik yula poaukala,[90] north the spirit remains; kwimik yula poaukala,[90] east the spirit remains; south and west, the same. It is held, tied, to the four quarters of the sky, so that it will remain there and will not get away.

Record 381. Kwinamish song. By Albañas. Tomamik yula Wanawut poponakala poñarakala auma,[91] etc. "To the north the

[87] Naav, a mountain south of Rincon, across the river from it; Wee'to, Pine mountain, across the river from Potrero; wee'tut, the great-coned pine, *Pinus coulteri*.—S.

[88] Malava, old village on Palomar mountain.—S.

[89] Yula wanawut, hair wanawut. These words may refer to plaiting the hair of a dead person and using it at dances for some time afterward.—S.

[90] Tomanik (resp. kwimik) yula poauwkala, north (east) the hair its-remaining; poauwkala, from auwi, to be, live, means it living, its living place, etc.—S.

[91] Tomamik yula wanawut poponakala pongarakala auwma, north hair wanawut its-tying its-fastening is; poni, tie; ngari, tie, fasten; po-, pronominal third person.—S.

spirit (double name) with (elaborately woven) strings remains tied." No kwinamo wunac qua auma.[92] "My spirit up there remains." Antares and Altair make the wind blow and remain there in the east.

Record 382. Kwinamish song. By Albañas. No suna qua haiyawa moyna, no suna qua takwaya moyna,[93] etc. "At the time of death, when I found there was to be death, I was very much surprised. All was failing. My home, I was sad to leave it." The second part means: "I have been looking far, sending my spirit north, south, east, and west, trying to escape from death, but could find nothing, no way of escape."

Record 383. Song of Munival. By Albañas. The Munival songs are individual and inherited. They describe the exact route of the Temecula people, ancestors to the singer, and the landmarks made by each to claim title to places in their migrations, usually at very short distances. Munival no qua awut,[94] "the tracks I do not understand." Munival no qua nalachat,[95] "the tracks I make mistakes about." They are therefore explained. The song mentions different places: Nachivo pomisavo,[96] the cañon the First People could not go through; Tokta totpa,[97] a place; Kawima polalak,[98] a certain hill; Ashwut kalikwona (eagle sits on something), a place; Waasawaha pometavoy;[99] and Exvo Temeko,[100] Temecula.

Record 384. Chatish song. By Albañas. The Chatish[101]

[92] No-kwinamo wuna'-kwa auwma, my-spirit (origin) there-then lives.—S.

[93] Noshunupkwa hayinga moinga, noshunupkwa takwayak moinga, then-I-thought at-race in-moon, then-my-heart is-surprised in-moon. A race called hayish was held at the time of the new moon; hayinga is the locative case, as moinga is of moila, moon. No-shun, my heart, is used in speaking of thoughts, sometimes with a verb and sometimes without.—S.

[94] Monival-no-kwa auwik, tracks-I-then do-not-know; auwi, to not know. —S.

[95] Monival-no-kwa nalahik; nalahi, to err.—S.

[96] Journ. Am. Folk-Lore XIX, 313, 1906: Nachivomisavo, a place "north of the San Bernardino Needles," where the hitherto united people were separated, thus acquiring distinct languages. Mr. Sparkman says: "A canyon near San Bernardino. Nachi, a negative verb, not to go in or under. Misi, a negative verb, not to go through, not to get past."

[97] Totka; totpa; names of places.—S.

[98] Kawimai polalak, name of a hill.—S.

[99] Wiashaha pomhetavoi or pohetavoi.—S.

[100] Exva (x German ch), a place near Temecula; Temeko, Temecula.—S.

[101] Chatush, a series of songs of wizards.—S.

series are secret individual songs, descended in the family or composed by the singer. This is a song the great-uncle of Albañas used to sing. No enge no mane hortata kulkula, etc., from my feet, from my hands, I drew forth, etc.[102]. Some of the shamans would extract something from their legs or hands or different parts of the body during the dances to show their power: acorns or rabbits or little snakes or frogs. Albañas's great-aunt was a shaman, and could vomit up from her mouth a small live rattlesnake.

Record 385. Song of Chatish. By Albañas. Nororia hechum sil pom mane,[103] etc. "It thundered. Something from their feet, their hands, etc." The earth shakes and rumbles when the shamans march around.

These songs were sometimes sung to make plenty, to bring abundance of rain, grass, and acorns. They are also called Songs of Numkwish[104] or Tuknish.[105] Each "hechicero" has two or three of these secret songs, which he sings at his house and not at public gatherings.

Record 386. Chatish song. By Albañas. These songs were also sung to hurt people with sickness and death, and this particular song could kill a man at a distance of many miles. Lewea lewea towowea, shoots off an invisible (spirit-like) power. The "hechicero" had within him something which could not be seen.[106] He would draw it out and throw it off towards the man he wished to injure. The "hechicero stick,"—wood without stone in the end, shaped like a small straight sword,—would be used to do this.

Sometimes several shamans met at a house to kill a man at a distance. Tukmul Chayut (double name: tukmul, flat coiled basket, Chayut, flat twined basket)[107] would be made ready, each

[102] No-engai no-mangai hothota kulkala, from my feet, from my hands, was drawn, was drawn. The first two words are ablatives, from no-e' and no-ma; hothota and kulkala are intensive forms of hoti, to pull, haul, and kuli, to pull up, pull out.—S.

[103] Ngorora hechasil pom-engai pom-mangai, sounded (thundered) something from their feet, from their hands.—S.

[104] Namkush, a ceremony performed with the idea of making acorns, rabbits, etc., plentiful. Namkokwat kwil, one who makes acorns grow.—S.

[105] Tu'nish, a ceremony to make plants which are valued, such as chia, sage, grow.—S.

[106] Lewya lewya towauya, meaning about as given, past tenses.—S.

[107] Tukmal; chayut, open-work sifting basket of rush.—S.

man bringing his own basket. Chungichnish said that they must always have tukmul chayut when they had the ceremonies or did anything. A certain Indian's mother was killed by witchcraft by his own uncle, after which some of his mother's people, shamans, met together at night and killed the old man in the same way. He died in a few days. Another well-known instance of these beliefs was the killing by witchcraft of the woman who dispossessed the Indians from an ancient village site, having acquired the land under the terms of a Spanish grant. The Indians thus driven off had their revenge in this way, and she did not live long to enjoy her property.

Record 387. By Albañas. Song of Anut, the large ant of the ant-ordeal, used as a hunting song, since the ordeal has been long discontinued. Pom peai yaumo oskamo.[108] "They kept the game to themselves." This tells about the animals when they were killed after the death of Ouiot. Mountain lion killed the deer, though he tried to escape from death. Tukwut, mountain lion, Iswut, wolf (long since extinct), Tomihut, summer-cloud or thunder-cloud,[109] were some of the chief men in arranging the ceremonies after the death of Ouiot. They are mentioned in the song.

Record 388. Song of Chatish. By Albañas. Words: Necop manaa, Towit manaa, Yawit manaa, etc. "It is coming to me. Towit is coming. Yawit is coming."[110] Towit is the thick mist that comes before the rain.[111] This is a Chungichnish song of plenty. One man will dance while another sings it. It may also be sung as an individual song at the Image ceremony.

Record 389. Sung by Lucario Cuevish. This song was sung in the ceremony for healing a man punished by Chungichnish. It is a Chungichnish song. Anyone in the old times revealing the secrets ("as I am doing now," he says), would be stricken down with illness, and these songs would aid in effecting his cure.

108 Pom-peai yaumuk oshkamuk, their-killing had did-not-wish-to-give; they did not wish to give away what they had killed.—S.

109 Tomihat or tomawut.—S.

110 Nekup mona, Towutup mona, Yawutup mona, to me it comes, Towut comes, Yawut comes.—S.

111 Towut, or Yawut, a fine dust seen in the air when the north wind is blowing at a distance.—S.

The song mentions hainit, the band around the head used to put the feathers in, and pecheya, feather headdress.[112] It tells about the shadows cast by the sun. The connection between hainit and the sun is hard to be understood; but the allusion may possibly be the same here as in the myth,[113] where it is difficult to understand who Hainit was. He was probably the one among the First People who afterwards became the head-band for the feathers.

Record 390. Chungichnish song. By Lucario Cuevish. The song mentions Muta, the horned owl, whose feathers make the sacred headdress. It mentions also the sea-weed on the seashore, one of the First People and sacred to Chungichnish. It mentions pecheya, feather headdress. The same words are repeated over and over.

The Chungichnish worship was brought to the mountains from San Juan Capistrano. Near Capistrano is a hill where there are a live rattlesnake and a raven, Chungichnish animals, that have been there from time immemorial. They are still there.

Record 391. By Lucario Cuevish. Not a song, but a recitative by the eagle; part of the Ouiot story. The eagle, seeking escape from death, went north from Temecula to San Bernardino, came around by the east to the south and west through Julian, Cuyamaca, and Palomar, going towards Temecula, and died at Temecula.[114] The eagle sang this song or recitative at Temecula. When he got sick he talked this way. He was talking about the spirit. When they were all going along they could hear something singing far away, and the eagle said that was the spirit; and he told the people that everywhere that he had been, north, south, east, and west, death was there waiting for them. It was very near. No one knew when it would come, but they would all have to die.

Record 392. By Lucario Cuevish. Song of the Eagle ceremony. The mourning for the dead, cutting the hair, and so on,

[112] Hainit, headband; cheyat, feather headdress, pocheya, his feather headdress.—S.

[113] Compare the latter of the two versions of the creation myth given below.

[114] Lucario's conception of distance is limited, perhaps on account of his blindness. This also illustrates the tendency in Luiseño myths to concentrate the idea of locality to the Temecula region, which would seem to have been the home of these Indians in very early times, at least in their own beliefs.

continues for a year or so, until they have the eagle ceremony at the time the chief decides. This ends the period of mourning. The eagle is killed amid universal lamentations. He is one of the representatives of the spirit and is connected with the spirits of the dead. The song means: "Stand up and hold the eagle in



Notation of Eagle-dance song. Record 392.

your arms. Do not be ashamed. Stand up, all, and dance." They dance around the fire and sing this song holding the eagle in their arms.

Record 393. By Lucario Cuevish. Recitative by Ouiot. Used in the Image ceremony. Ouiot tells of his sufferings and names the months in which he may die.[115]

Record 394. Toloache ceremony march song. By Lucario Cuevish. Tamyush noya kwoya, etc., Tamyush marches by twist-

[115] See the corresponding passages in the creation myths.

ing.[116] The power of motion attributed to tamyush, the sacred stone bowl, and this song, have been mentioned in the account of the toloache ceremony.

Record 395. By Lucario Cuevish. Song of Wukunish, the girls' ceremony. This is the last song of the ceremony, and is sung by the women. The women's songs all end by mentioning Elsinore, where Kauko and Chehemal[117] first had menses. When the first ceremony was concluded, they felt happy and composed this song. It mentions the journeying of the First People from Katuktu to Kalaupa[118] and then to Elsinore.

Record 396. By Lucario Cuevish. Song of Munival, landmarks. This mentions the turtle-rock on the land now occupied by Albañas, but owned by Lucario's ancestors from time immemorial. There is a large flat rock there marked with cracks like the markings on a turtle's back. This used to be a turtle and was left in this shape as a track of possession. The song means that he is singing to his ancestors. He is singing about the rock. It is his. They left it here to claim the land which was theirs.

Record 397. By Lucario Cuevish. Song of the girls' ceremony. Words: No ashwo,[119] etc. I am menstruating. One man sings this to the accompaniment of the ringing stones in the girls' ceremony while the others dance. This song mentions the mountains that were First People, starting with San Bernardino on the north; Taakwi popat, San Jacinto; Kupa Kawima (Kupa hill), the mountain at Warner's ranch; I'pa, Volcan; Kachikchi; Cuyamaca; Pawi Chawimai, hot spring near Cahuilla; Waheto Naavo, hills east and south of Potrero in the mountains; Pahamuk Malava, pre-historic village on Palomar mountain.[120] The song also mentions So-o Ponota,[121] the famous place where the first Notish

[116] Cf. page 79.

[117] Kaukau, blackswift; chekemal, kingbird or bee martin.—S.

[118] Katukto, a hill probably between Bonsall and San Luis Rey, where the people are said to have taken refuge at the time of a flood; Kalaupa, mountain near Santa Margarita.—S. See the story of the Flood below.

[119] Non ashka, I am menstruating the first time.—S.

[120] Taakwi, San Jacinto mountain; po-pet, his younger brother; Kupa, Agua Caliente or Warner's Ranch, kawimal, hill; I'pa, Volcan; Kachikchi, Cuyamaca mountain; Pawi, warm spring in village at Cahuilla valley, Chawimai, probably Duraznos valley at Cahuilla; Weye'to, Pine mountain, across the river from Potrero; Naav, a mountain south of Rincon; Pahamuk and Malava, old villages on Palomar mountain.—S. See *ante*, notes 82 to 88.

[121] Shoau po-nota, Shoau its notush ceremony; Shoau is a place on Palomar mountain.—S.

ceremony for the dead was made and races were held. It mentions also Wikio Potoypa,[122] a place on Palomar ridge towards Temecula. San Bernardino, gray-head, white on top, is the elder brother; San Jacinto is the younger brother.

Record 398. By Lucario Cuevish. Song of the Flood. This mentions Katuta,[123] Mora, the little hill that was the only dry land when the water covered the high mountains.[124] This hill was one of the First People.



Notation of Image Ceremony song. Record 399.

[122] Wikyo, the highest peak of Palomar; Potopa, a place on Palomar mountain.—S.

[123] Katukto.—S. Cf. *ante*, note 118.

[124] See the second of the Luiseño creation myths given below.

Record 399. Ouiot Song. Pikmakvul. Sung by Juan de Dios, now blind and partly demented from old age. Once a famous chief, and leader of the ancient religion. Ouiot sang this when he was at Temecula, where he died. (See notation of this song on opposite page.)

Record 400. By Juan de Dios. Ouiot Song. Pikmakvul. Ouiot's counsel to his people when he was dying.

Record 401. Song of Pikmakvul. By Juan de Dios. Ouiot enumerates the "months," in each of which he expects to die.

Record 402. Pikmakvul. By Salvador Cuevas. Ouiot song, sung while the images are being burned.

Record 403. By Salvador Cuevas. Song of Temenganesh, telling of the "month" Tasmoymal. The spider-web now catches butterflies and grasshoppers.

Record 404. By Salvador Cuevas. Chungichnish song, in the language of the coast, now extinct. It was taught to Salvador by Hilario, a famous singer from the coast.

Record 405. By Salvador Cuevas. Two songs of Tomaiyowit,[125] the Earth-mother. She sang these when she was making the land larger for her children.

Second song on same record. Chungichnish song, sung by a boy when he jumped into the fire.

Record 406. By Salvador Cuevas. Song of Tomaiyowit, sung in the Image ceremony. This song tells of the noise and confusion when the First People were being born. The songs of Tomaiyowit may be a separate series, though they are not so described.

Record 407. By Salvador Cuevas. Song of Munival, the landmarks of ancestors. This mentions some small hills, and the cañon which was too small for the people to go through. Some of Salvador's ancestors were there.

Record 408. By Salvador Cuevas. Song of Kwinamish, the spirit. Tomamik yula, tomamik wanawut, etc. To the north the spirit, etc.[126] This song mentions the names of those First People who were sent north, then those in the east, south, and west. It mentions Sovul (a plant) and Makawut, wild grapes,[127]

[125] Tamaiyowut.—S.

[126] Literally, to the north the hair, to the north the wanawut-rope.—S.

[127] Shovul, *Rhus aromatica* or *trilobata;* makwit wild grape-vine.—S.

people of the East; and Pauwhut Abahut, hollowed long coffer used to keep sacred feathers in,[128] people of the south.

Record 409. By Salvador Cuevas. Song of Nahachish,[129] one of the Temecula people, who gave names to all the localities in the La Jolla mountain region.[130] This song mentions the *chia* seed they used to gather in early days, and another plant with small black seeds used for food. It mentions the deer feast, Pisatish.[131] The last food of the year, the last of the store of seeds and acorns, could be eaten only by the old people. Nahachish was a great glutton; and it is significant that the name means also a disease, consumption, and an insect.

Record 410. By Martasal Tabac. Ashish song. The song mentions Deer when, like Eagle, he tried to escape from death. He sent his spirit north, south, east, and west, trying to find a way of escape; but death was everywhere; and Buzzard and Blue-fly followed him and killed him.

Record 411. Anut song. By Martasal Tabac. This is a very old song which he learned from his ancestors; the ceremony being done in very ancient times. These songs of Anut were later sung in the girls' ceremony.

Record 412. By Martasal Tabac. Song of Pikmakvul. Image ceremony. The women dance while this is sung. The song tells how they prepared the ground to burn the body of Ouiot, first digging a shallow hole and placing wood there for the funeral pile. Then they went around three times and laid the body on the pile and started the fire.

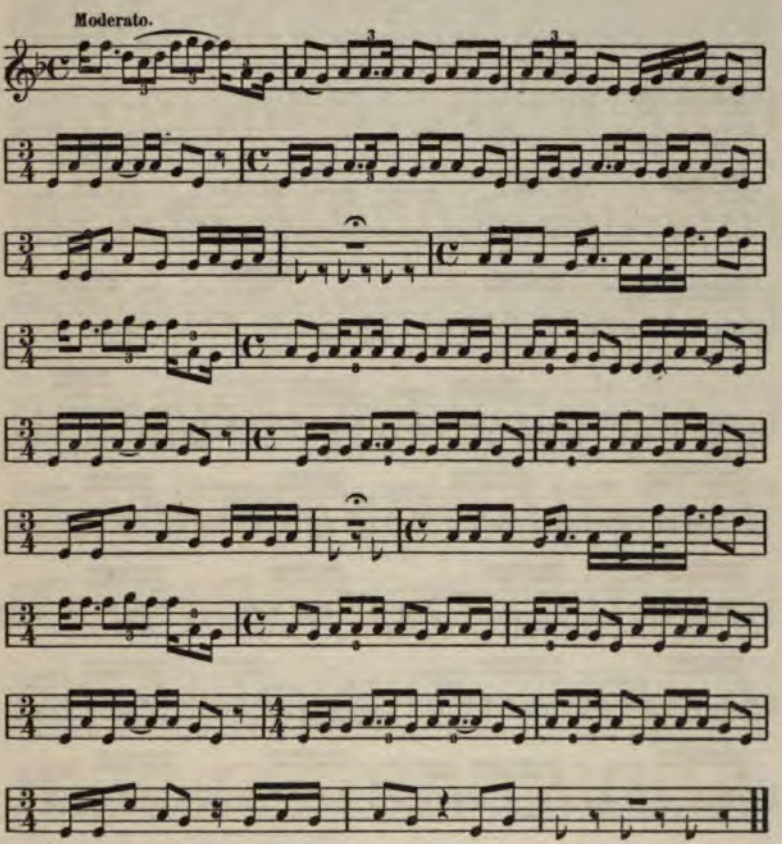
128 Pauhit, yellow pine, also canoe; avahut, cottonwood. It is said that the feathers of San Luis Rey were kept in a canoe that was found on the beach and considered sacred.—S.

129 Nahachish, a man of Temecula; the walking-stick insect; consumption; with a possessive prefix, -nhacho, plural -nahacho, old age, men, or male animals. Nachaonwut, glutton, from nachooni, to eat.—S.

130 See the tradition of Nahachish, below.

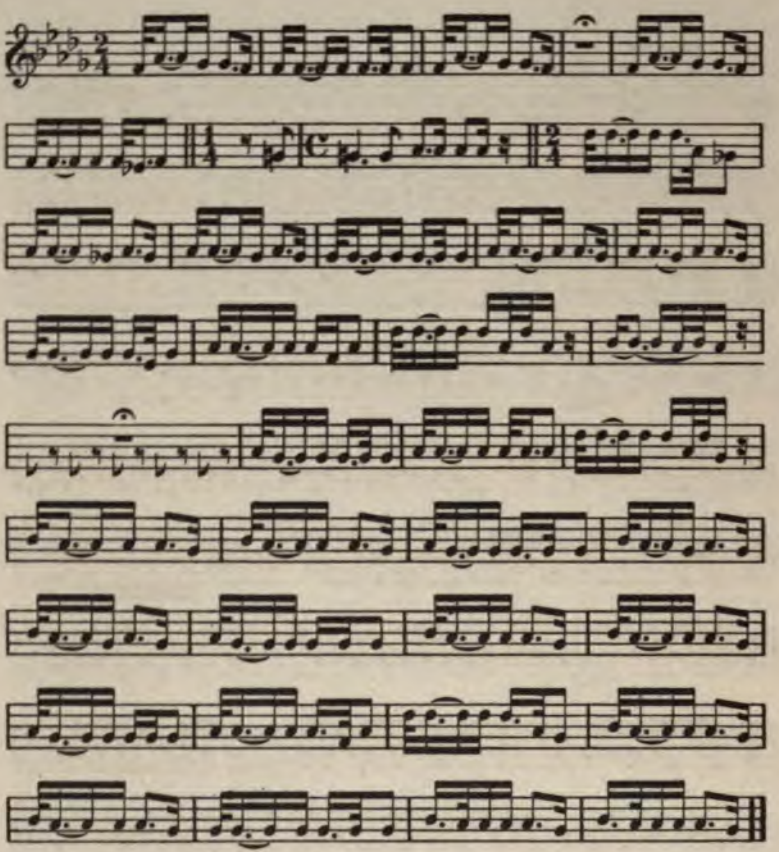
131 Pisatish, a feast where a deer was killed and divided up.—S.

Record 413. By Martasal Tabac. Song of Pikmakvul. Image ceremony. Ouiot is very sick and names the months in which he may die. After his death, when death came to all, these songs were composed. They were made at that time. A notation of this record is given below.



Notation of Image Ceremony song. Record 413.

Record 414. By Martasal Tabac. Ashish song. This song mentions the man who leads the hunt. When the men go rabbit hunting they meet in a certain place where a stone stands up at the side of the road. This song is given in notation below.



Notation of Ashish song. Record 414.

Record 415. By Martasal Tabac. Women's Ashish song. The men's and women's songs are about the same, but the tunes are different. This song mentions the hill where the rock is painted after the conclusion of the ceremony.

Record 416. By Salvador Cuevas. Temenganesh song. This song mentions the stars. When Ouiot was dying he talked about the east where he was to rise. The song mentions Nükülish and Yungavish, Antares and Altair. The eagles now fly. This is the month Townamal.

Each man's songs are different from another's, having reached him in a strict line of descent; but the subject matter of each song series is the same with all.

Record 1079.[132] Sung by Juan de Dios. Song of Ouiot. Image ceremony.

Record 1080. By Juan de Dios. Song of Ouiot after he was burned, sung in the Image ceremony after burning the Images.

Record 1096. By Juan de Dios. Ouiot song.

Record 1082. Sung by Margarita Subish. Women's song of Ouiot. Pikmakvul series. Ouiot mentions the different months in each of which he thinks that he may die.

Record 1098. By Margarita Subish. Song of Tochinish, Image ceremony. Women's song, telling about making the images; sung while they are set up in the sacred enclosure.

Record 1084. By Margarita Subish. Song of Wukunish, the girl's ceremony. Women's song sung to the accompaniment of ringing stones. Gives instruction to the girls.

Record 1085. By Albañas. Toloache song. After drinking the toloache they march to the dancing place, and begin to feel the effects of the drink. This song tells of the beginning of the intoxication.

Second song on the record. A Chungichnish song sung when they reach the dancing place.

Record 1100. Sung by Albañas. Song of Pikmakvul sung in the Image ceremony. Ouiot counts the "months."[133] The

[132] The songs on the following thirty records, together with some of the Luiseño myths, were collected with the assistance and co-operation of the American Museum of Natural History, through the courtesy of which they are here published. The numbers refer to the Museum's catalogue.

[133] For an account of these "months," which are not lunar, see the section on Star Lore and Calendar, below.

month Tasmoymal, when the grass begins to grow green, is mentioned.

Record 1076. Creation song of Kivish Atakvish. This song does not belong to Albañas who sings it, but to the chief of his "clan." It is very sacred. The song tells of Tukmit and Tomaiyowit, Sky and Earth.

Record 1100. By Albañas. Ouiot song. Sung to the accompaniment of the rattle. This is what Kingbird sang on the housetop in the early morning: "Ouiot is coming." The stars Nükülish and Yungavish, Antares and Altair, are mentioned.

Record 1088. By Albañas. Song of Tomaiyowit, the Earth-mother. There are ten or fifteen songs about Tomaiyowit. They dance to some and not to others. This tells of the birth of her children. They stayed in that place and then journeyed to another place.

Record 1077. By Albañas. Ouiot song. This tells about Wahawut who killed Ouiot; and mentions Orion and the Pleiades when they went up in the sky.

Record 1102. Sung by Salvador Cuevas. Song of the dead, not used for dancing; but sung in the Image ceremony; or when relatives come to console the family for the death of a member they stay all night and sing this song. It mentions Antares and Altair rising in the early morning. When Antares rises winter is at an end. Grass and fresh things come up; everything dry now grows green. Then when Altair rises the grass is higher.

Record 1091. By Salvador Cuevas. Coyote kills Wahawut.[134]

Record 1092. By Salvador Cuevas. Song of the dead. This mentions Muta, the owl, Ano, coyote, and Pawewish, fox.[135] They always come around the house when some one is going to die. The song tells how they are coming nearer and swarming around.

Record 1078. By Salvador Cuevas. Chungichnish song in the extinct language of the coast. This song came from Lukup, a large rancheria south of Santa Ana on the coast.[136] Pura means Chungichnish in the old language of the coast. A man named

[134] See the myth of How Coyote killed the Frog, below.

[135] Ano'; Kewewish.—S.

[136] Lukup, Las Bolsas. See this series of publications, IV, 144. Las Bolsas was in territory inhabited by Indians speaking the language of San Gabriel.

Hilario came from Ushma, now Las Flores,[137] where there used to be a big village, and taught this song and other songs and dances.

Record 1095. By Salvador Cuevas. Chungichnish dance song. This is sung at the time when the feather headdress is buried in the center hole of the sand-painting in the ceremony performed when one of the initiates dies. The song tells about pecheya, the feather headdress, and muta, the owl, whose feathers are used to make it.

Record 1097. Diegueño. By Hatakek. Tutomunp. It refers to Wikami, Mohave Avikwame, the sacred mountain where all the people were created and where all religious song and dance originated. This place is alluded to at the beginning of every ceremony. The song means: There were two brothers. The father died and his spirit went north into the pine trees and forests. The sons went after him. When they got there they heard the spirit crying. This is the noise in the pine trees.

Record 1083. Diegueño. By Hatakek. Song of Wukaruk, the Image ceremony. The first song on this record means: Two brothers were going along when one was bitten by a rattlesnake, and died of the bite. The other was afraid of his spirit. It was following him and terrifying him. The second song on the record means: He came to the track of Coyote. There was the Coyote's track. This is a women's song of the Image ceremony.

Record 1075. Diegueño. By Hatakek. Song of the Image ceremony, Wukaruk. When Tuchaipa died through the work of the frog, they wanted to make the Image dance and sent to Maiheowit to get him to teach them how. Then they burned the sacred house and burned him too.

Record 1099. Diegueño. By Hatakek. Song of the Image ceremony. It tells of Ishpa, the eagle, and describes his feeling when he knows that death is near. Compare the Luiseño song of the eagle, above, number 391.

Record 1086. Diegueño. By Hatakek. Song of the Image ceremony. This tells of Coyote. He slept all night and was warming himself in the early morning. The series of these songs

[137] Ushmai, Las Flores, place of roses, from ush-la, rose.—S.

is almost endless, as they are sung all night and for several nights during the Image ceremony. Each song is different. It is impossible to collect the entire series or to trace very clearly the connection between the songs. The singer, a very old man from Manzanita, was sent for far and wide to conduct the Image ceremony on the occasions when it was celebrated. The memory displayed in retention of these series of songs is remarkable.

Record 1087. Diegueño. By Hatakek. Song of the Image ceremony, telling of the great horned deer, probably the elk.

Record 1104. Diegueño. Sung by Pion. Dance song called Orup from the desert Indians. It tells about two brothers building their house.

Record 1089. Diegueño. Sung by Pion. First song on the record: Two brothers are building a house. Coyote sings in the early morning. The third song on the record tells about the willow trees.

Record 1090. Diegueño. Sung by Pion. Songs of Orup. The first song on the record tells about the clouds from the north, Katutl; the south, Kawak; the east, Awik; the west, Nyak. The second song is a night song, and tells about the dark night.

Record 1073. Diegueño. Sung by Hulapok Hitlmiup. Song of Akil, the girls' ceremony. The men have bows and arrows in their hands and dance as they sing this song. Both men and women dance in a circle, at different times, around the place where the girl is in a hole in the ground covered with brush.

Record 1074. Diegueño. Sung by Hulapok. Songs of the Image ceremony. First song: The man who makes the images goes into the house and cries. The second song mentions the birds. The bird cries.

Record 1103. Diegueño. Sung by Hulapok. Song of the wild-cat dance. This dance comes from the Mohaves. It is accompanied by a gourd rattle, hulma. For the Image ceremony they use a deer-foot rattle.

Record 1093. Diegueño. Sung by Hulapok. Song of the toloache ceremony. The old dancers are seated in a circle on the ground, while the chief pounds the toloache root in the sacred stone bowl to the accompaniment of this song.

Record 1094. Diegueño. Sung by Hulapok. Toloache song.

This song is the same as the beginning of the war dance. It also repeats part of the last record, which is sung when the dancers come in on hands and knees. The singer drank the toloache in his youth. The last ceremony at Manzanita was about fifty years ago. Five old men remain in this region who are toloache initiates.

Record 1072. Diegueño. Toloache song. Also a war dance song. This song is also used at Mesa Grande. Hulapok, the singer, first heard this song at a village called Hawiya, south of Julian.

Besides the ceremonial songs, the myths have their own songs, which are incorporated in the story as part of the text which they amplify and explain, giving character to the narrative as light and shade do to a picture. The story can be told without them, but it loses much of its emphasis and impressiveness.

The Cuyahomarr story of which three versions have been given: one from Mesa Grande, called The Story of Chaup;[137a] and two, one a fragment, from Manzanita,[137b] is a good example of a primitive myth in which the narrative is blended with song.

The Luiseños have a version of the same story communicated to them sixty years ago by the Mesa Grande people.[137c] Some of the old men among the Luiseños can sing its songs, but they hesitate to relate the story from the Diegueño, being uncertain of the meaning in parts, especially in the songs.

One such song was sung to me by Salvador Cuevas, Luiseño, but he was reluctant to begin it, fearing that Takwish, Chaup, might overhear him. As Chaup's dwelling place is in the San Bernardino or San Jacinto mountains, not so very far from La Jolla in the mountains, the fear seemed well founded.

The Diegueños identified the being whose name on earth was Cuyahomarr, the wonder-working boy, and whose name in the sky is Chaup or Shiwiw, with the large meteoric fire-ball which is his physical manifestation.

Certain Indians, it is said, have an ogre myth-being who is

[137a] Journ. Am. Folk-Lore, XVII, 217-241, 1904.

[137b] Ibid., XIX, 145-164, 1906.

[137c] See ibid., XIX, 317, 318, 1906, for a statement by a Luiseño informant that he knew only the last part of the story of dakwish or takwish, Diegueño Chaup, but that the Diegueño knew the first part.—Ed.

identified in their myths with the electric fireball. The two stories have therefore become blended to a certain extent; but while the full text of the Diegueño Cuyahomarr myth has been obtained, and some fragments of the ogre story have been secured, it has not been possible to trace the latter with precision.[137d]

Chaup is feared among the Luiseños and Diegueños, but why or in what degree it is difficult to say. It is said that the Indians believe that if he casts the shadow of a man on the ground in his passage overhead, the man will soon die.

The Luiseños sometimes call him Towish Takwish, which means spirit meteor. The younger Indians, who know only the corrupted meaning of Towish, which in modern Luiseño is 'devil,' understand it in that sense.

Takwish, Salvador Cuevas explained, takes the spirit of people just before they die. He does not take the body. One sees the light because he is carrying the spirit.

The following are graphophone records of songs of the Diegueño Cuyahomarr myth.

1. From Mesa Grande. Sung by Antonio. The flute is making music to call the girls.

Ichtaha kwataha, Ichtaha kwataha, Toli otoli, toli otoli, Ichtaha kotoho, Ichtaha kwataha, Toli otoli kotoli, Toli otoli kotoli, etc.

The brothers sat down facing in turn towards the north, south, east, and west, and girls from the four quarters came to them attracted by the music, but none pleased them except the girls from the east.

2. By Antonio. The girls by the pond first hear the music of the flute. "It was the younger sister who first heard the music. The girls were on their way to a pond where they used to swim every morning."

3. By Antonio. The girls' song of farewell to their home. They have come very far and they can see their home far away. "They looked back and saw their old home and sang a song of farewell."

4. By Antonio. The old woman, Sinyohauch, or Sinyohau',

[137d] See Journ. Am. Folk-Lore, XIX, 317, 1906, for Luiseño beliefs of the cannibalistic tendencies of Takwish.

calls the girls from the east to come and marry her sons. Wichukama, wichukama, repeated many times.

5. By Antonio. The two brothers marry the two sisters.

6. By Antonio. "We shall die for the sake of the girls. I shall never see my home again." The elder brother's song.

Cinan chakom whi-i-i.

Ocinan chakom whi-i-i, repeated many times, but the tune varies.

Mainan chakom whi-i-i.

Kamaina chakom whi-i.

7. By Antonio. Cuyahomarr sat on his grandmother's lap and she put her arms around him and they both cried. Antonio feels like crying when he sings this:

Kawa kowa hi-i, Kawa kowa hi,
Kawa kowa hi-i, Kawa kowa hi, etc.

8. Manzanita Diegueño. Sung by Hatakek. First song on the record. The younger brother's music on the flute. Second song, that of the elder brother making music on the flute. Third song, that of the younger sister who is tired and lagging behind. " 'I can come no faster,' said the younger sister. 'I am thinking of my old father whom I left behind.' "

9. Manzanita Diegueño. Sung by Hatakek. First song on record. Sinyohauch sings to call the dead eagles to come to life and come to the boys' home. Second song. The elder brother sings to call the girls.

Third song on the record. The song of the brothers when the whirlwind lifted the eagles out of their graves. "No sooner had they buried the birds than the whirlwind swept by, lifting the dead eagles from out of the ground, and carrying them through the air."[137e]

10. Diegueño song sung by a Luiseño, Salvador Cuevas, who does not know exactly what the words mean; but it is the song sung by the boy in the gambling game when he began to win back all that his uncle had lost. "As soon as he fixed his eyes upon him he made his uncle win. He began winning back every point he had lost." See Manzanita version of Cuyahomarr story.[137f]

[137e] Journ. Am. Folk-Lore, XVII, 217-241, 1904.

[137f] Ibid., XIX, 145-164, 1906.

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MYTHS.

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The following are
Diegueño Cuyahomarr

1. From Mesa Gr
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2. By Antoni
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3. By Ant
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4. By A

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stories and authority of the other.

Diegueño, who has lately died, was

Juan de Dios of La Jolla,

by age, would be an authority,

ceremonies in his pueblo. Apolonio

ceremonies, and a devoted adherent

Cuevas still leads ceremonies, but

authority than from his own ability

everything, having learned from

were still in force when he was a boy.

of the few authorities now living.

of things once vital, now mere

how valid are the claims of each

says that Jose Albañas knows

of Albañas doubt Salvador's memory.

he is best informed.

in this connection is that it further illus-

ation of family groups shown also in

songs. I have suggested that in

may have been clans of some sort. The

in families with more or less distinct-

as in the case of the songs, as no one

The tendency to variation in the myths is,

segregation into groups, which is the

of which traces can be found.

LUISEÑO CREATION.

Third Version.[187d]—By Salvador Cuevas.

[187d] Of the Luiseño creation myth, one a fragment, have been given, which are probably more primitive than the version related by Salvador Cuevas and Lucario Cuevish, Jesús and Potrero in the mountains. See also *ibid.*, Journ. Am. Folk-Lore, XIX, 145, 1906. See also *ibid.*, cannibalistic

Everything in the beginning was empty and quiet. Kivish Atakvish[139] [140] was the only being.

Next came Whaikut Piwkut[141] (whitish gray, unexplained).

Whaikut Piwkut created two objects like great round balls called Maikumkush[142] (meaning, something round, not having an end).

They lay there three days and then were made alive, brought into being, after which they recognized each other. They were called Soimal-um[143] (-um being the plural ending). They were male and female. Whaikut Piwkut, being the father of these two, left them and was no more seen.

The two children (created beings) remained there. When they were by themselves, they quarreled: "I am older than you." "No, I am older than you." Each could read the thoughts of the other and this contention continued. The female being said that she was the older. She was Kivish Atakvish. The male began describing the color of the sky, by this to prove his earlier existence. "See, I am older than you." She got a stone smoking pipe, chahal,[144] and showed it to prove herself the first. He got three kinds of pipes, kalulmul, nyatlumul, and chetmul,[145] and held them up, and thus he silenced her and won (in this contention). Then with sighs (guttural breathings used in solemnities), he made her sleep, and after this she knew that she was to be a mother. He was ashamed of his deed, and went up in the sky (*i.e.*, became the sky). He was Tukmit,[146] the Sky.

139 Luiseño religious terms are double, made of two words, each with a different meaning supplementing and reinforcing each other—a very marked peculiarity.

140 Kyuvish, empty, solitary, unoccupied; also a noun, as in po-up auma kyuvi-nga, he lives in solitude. Ataxvish (x German ch), empty. Kyuvish Ataxvish, used together, mean some thing like the empty, solitary, unoccupied place, and are used in speaking of before the world was created. Kyuvish Ataxvish is also spoken of as a person who made Tamayowut, the first woman, and Tukomit, the first man.—S.

141 From whaiahat, white, piwahat, whitish, grayish.—S.

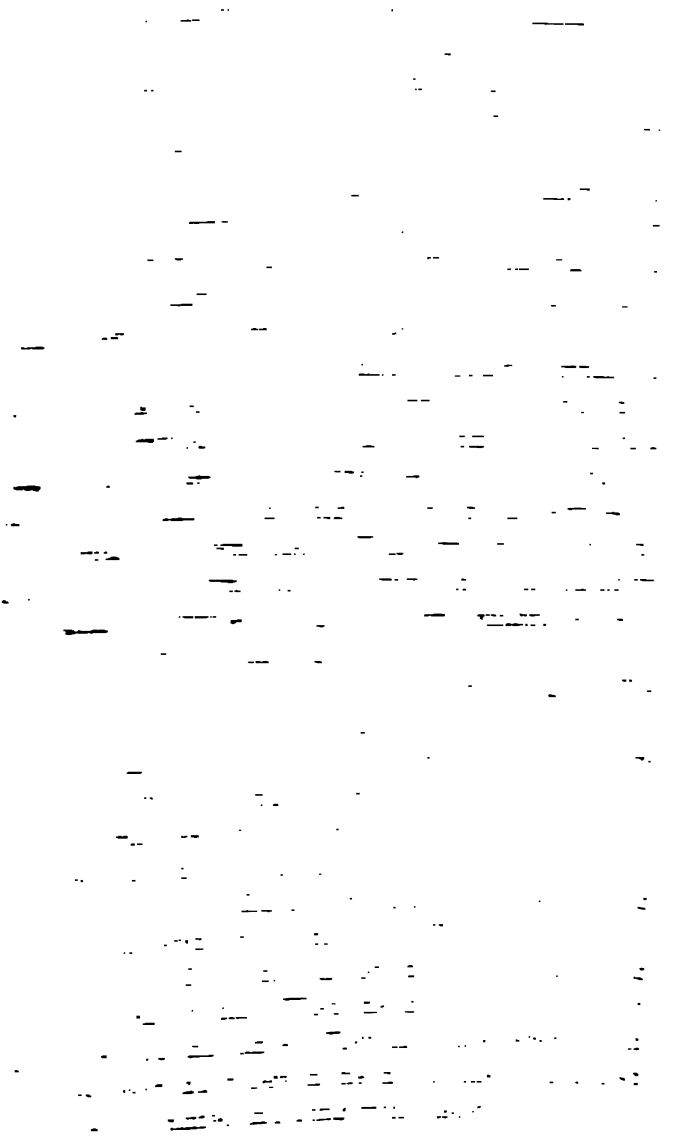
142 Makumkush, round.—S.

143 Saimalum. Some say these were a man and a woman born from two eggs made by Whaikut Piwkut; others deny this.—S.

144 Hahal, stone pipe.

145 Kalulmal, ngatlamal, chetmal. There is only one man who knows of these words.

146 Tukomit, night, also the first man, made by Kyuvish Ataxvish; tupash is sky.—S.



5. *Mahul Kwichal.*[151] Mahul, palm tree; kwichal, Spanish bayonet, yucca. These were sent East.

6. *Tukvul Wekunla.*[152] Tukvul, carrying net; wekunla, sort of carrying sack. These were sent South.

7. *Somal Kachamul.* Meaning unknown. Sent South.

8. *Makwit Awiwunowut.*[153] Makwit, wild grape; awiwunowut, clematis. Sent to the center.

9. *Paulovla Tovolwish.*[154] These were sent East. Paulovla is a tall painted mast in the middle of the sacred inclosure used by the Indians in the East, who got it from the First People. Tovolwish means the color of this painted post.

10. *Uutish Kahankish.* Uutish, tree that grows in the East; kahankish, unknown. Sent East.

11. *Pauhut Abahut.*[155] Pauhut, canoe (also a box hollowed out of a log to keep things in); abahut, cottonwood tree out of which it is made. Sent West.

12. *Pevesish Hoyowish.*[156] Pevesish, tule; hoyowish, cat-tail rush. Sent West.

13. *Sanut Tanahut.*[157] Sanut, black asphalt on the seashore; tanahut, sea-weed. Sent West.

14. *Yuamul Tovoymul.*[158] Yuamul, pine tree; tovoymul, cedar. Sent to the center, *i.e.*, where "we" live, the Mountain Indians.

15. *Kwila Sukut.*[159] Kwila, oak with edible acorns; sukut, deer (both used for food). Sent to the center.

And here should probably come *Hunut Ashwut,* in the center instead of to the North.

151 Mahul, palm; kwichal, unknown; the species of yucca growing in the San Luis Rey valley are called panal and hunuvut.—S.

152 Tukval is sea-otter; the carrying net is called ikut; wekunla, network sack with very fine mesh.—S.

153 Makwit, wild grape-vine; awiwanawut, clematis.—S.

154 Paulovla, (?); tovolvush or tovolovahat, adjective meaning of different colors.—S.

155 Pauhit, yellow pine, also dug-out canoe; avahut, cottonwood tree. It is said that the feathers of San Luis Rey were kept in a canoe found on the beach and considered sacred.—S.

156 Pevesash, tule; hoyawish, species of rush.—S.

157 Shanut, asphalt, gum; tanahut, sea-weed.—S.

158 Yuila, species of pine, tovut, cedar; yuimal and tovomal are diminutives.—S.

159 Kwila, *Quercus californica;* shukut, deer.—S.

(Here belongs the song sung by Tomaiyowit, the Earth-mother, to make the land larger for her children, as previously given in the description of phonograph record 405.)

The Earth-mother sent these first-born of her children to the North, South, East, West, and Center. After this everything else was brought forth. The sun came forth at the same time, and as he was there among all the rest of the people, he gave so much light and heat that he nearly killed them all. It would be better to send him away. So they sent him to the east, and in three days he rose in the east. All things were now prepared. Before this all had been confusion and disturbance, but now Tomaiyowit lay back outstretched, her feet to the north, her head to the south, her right hand to the east, her left hand to the west, and everything became quiet.[160]

This ends the first part of the Creation Story.[161]

The Earth-mother, when she sent her children to all the four quarters of the world, made feathers for them to wear on their heads. The chief men, the best, quickest and bravest in battle, used to wear them on a long stick high on their heads, and the others wore them close to the head.

While the people were traveling along, carrying arrows, they would stop at a pond to play and swim about. Ouiot was traveling along with the rest and they did not know anything especial about him. He was like one of the rest.

Wahawut[162] was a handsome fine-looking woman, with long hair. When she jumped into the water, Ouiot was surprised to see that behind she had no flesh on her body, but was flat and thin. He said nothing but was thinking about it. Wahawut could read his thoughts, and made her plans to kill him. Soon he fell sick.

Ouiot got sick and said he wanted to see his sons. At this time he acted to the people like a father. Before this he had only

160 This is why all ceremonies are performed facing the north. Cf. the drawing by a Luiseño in Journ. Am. Folk-Lore, XIX, 312, 1906.

161 Another old Indian story teller here appeared on the scene and some tact was necessary to manage the situation. It was feared that Salvador might object to the presence of a rival; but when asked if he were willing to continue his recitation he smiled and said that there need be no jealousy as he told nothing but the truth. So he continued.

162 Wahawut, frog, an ugly woman that bewitched and killed Wiyot.—S.

been a person like the others. Now he called for his sons (the First People) from the north to come and see him, and they all tried to cure him. They were like witches then, and could tell by looking at him what was the matter; and they all tried their best to cure him, but could give no help, so they went back north. In the same way the people came in turn from the south, east, west, and center, but could do nothing. Tishmel[163] the hummingbird was an important person then and he went to see if he could find out what was the matter. Sakapipi,[164] who is now a tiny bird, got up and put his ear to Ouiot's heart so that he could hear his breathing, and then he said it was Wahawut who was working to kill him by witchcraft.

Then the people found out that it was Wahawut who was doing this; but she had gone down into the mud and water and never was seen. Since she began to work against Ouiot she stayed there. (No. This is not the place in the story to explain that she was the frog, for she was a person then. They were all people at that time.)

Ouiot told them that he would not live much longer. "I think I shall die soon," he said, and he mentioned the names of all the months, and each month they waited until the time was up. "I may die in this month."

When Ouiot was sick, he told his people to take him to the hot spring at Pawi Chawimai[165] (Cahuilla), and they took him there, and he bathed in the waters, but did not get any better. On the contrary he grew worse and worse. Then they took him to Kupa Kawima[166] (Agua Caliente, Warner's Ranch Hot Springs), then to Paska Mahala,[167] a little further on, then to Pauma, near Pala. When there he died but revived again. They got ready to burn his body, making use of the same sticks with which they clubbed Coyote. When he revived again, they took him to Malama Ekapa[168] (Agua Tibia), trying all these hot springs to cure him, but

163 Tushmal.—S.

164 Sakapepi, titmouse, who found out who had killed Wiyot.—S.

165 Cf. notes 84 and 120.

166 Cf. notes 85 and 120.

167 Paskwa, San José, on upper San Luis Rey river, given in this series of publications, II, 148, as in Diegueño territory.

168 Malamai, Agua Tibia.—S.; *ibid.*, this series, II, 147.

they did no good. Then they took him to Cherukanukna Jaquiwuna,[169] near Temecula, to the hot spring there.[170] Then to Etengvo Wumoma,[171] hot springs at Elsinore, and this was the last place, for he died there.[172]

Before Ouiot died he told Chehemal (the kingbird now)[173] that he was going to die, but he said he would come back, and told him that in three days he would rise in the east.[174] Kauki Chahiwul,[175] something gone that comes again. Ovaweleva, something that will come back, disappears and returns.

He died in the season Soimamul mokat. When he died the people wanted to burn his body, and they sent Coyote to the north to the people there to see if he could get fire; but he only went a little way and came back. Then they sent him to the people of the east, Uutish Kahankish, and so on, and in the same way to the people of the west, the south, and the center. Each time he went a little further off, and while he was gone Sariwut,[176] the bluefly, made the fire with the fire-drill.[177] Then Coyote came running back yelling and saying: "Why do you play such a trick on me? I want to see my father."

The people all stood around the fire where only the heart was left unburned, and Coyote starting a little way back took a running jump over their heads. Wiskun, now a tiny squirrel, the chipmunk, was the strongest man then, and he had gone and brought a log ten men could not lift. Ouiot was laid on it. All the body was burned but the bones, after Coyote got the heart.[178]

169 Cheruka, locative Cherukanga, large rock near Potrero; also one near Temecula.—S.

170 A few miles the other side of the railroad station near Murietta.

171 Etengvo; Mumoma.—S.

172 The names of all these places are mentioned in the Ouiot songs.

173 Chehemal, kingbird or bee martin.—S. Given in Journ. Am. Folk-Lore, XIX, 313, 1906, as chekhemal, a bird, possibly the meadowlark.—Ed.

174 Perhaps a trace of Christian influence.—But compare the incident in *ibid.*—Ed.

175 Kauki chehevo, said to be the name of a place.

176 Shariwut, blowfly.—S.

177 Albañas, commenting on Salvador's story, says that the idea of the fire being started by Bluefly with the whirling-stick came to these Indians from some other source, he thinks from the north. Juan de Dios gives the Bluefly as originator of the fire. Albañas in his version leaves it in doubt as to where it came from, but he evidently approves Lucario's statement that it was Glow-worm who had the fire.

178 Coyote jumped over the heads of the people into the fire to seize the heart of Ouiot, which he ate.

When the three days were up, Chehemel got on his housetop in the dark and sang and everyone listened. Meaning of the song: "Ouiot, Ouiot is coming. He is coming. I am watching for him, looking to the east. Ouiot is coming."

Pretty soon he did come, as the new moon, Moyla achagha.[179] They could just barely see it, a little line. Chehemel saw it in the east, but no one else could see it there. The others saw it in the west.

Before Ouiot died, he told them when they saw him, the new moon, in the west, they should get together and make races (as an answer to the moon, giving their spirits to it). If they made these races, and shouted at this time, they would live longer. (This means that as a part of the Chungichnish ceremonial, obedience is required, and reward or punishment promised for that or the reverse, as in all the Chungichnish instruction.) After this they always made these races. Salvador remembers them, sixty years or so ago, when he was a boy.

The chief men who had charge of these things would know when the new moon was expected and would watch for it. Then they would get ready, and just as soon as the moon appeared one man would start a fire and shout, and all would come together. They would shout three times, and then all start together in a straight line, side by side, and run until the fastest runner got ahead of the others, when he cut across in front of them, and that was the end of it. There might be from twenty to fifty who did the running. They made the indescribable guttural invocation to send their spirits to the moon, and they had to have a fire as they did in every religious ceremony. The head men always started the fire, and the long ceremonial pipes they smoked were lighted at it.

At the time Ouiot died he did not talk much, but only told them about the races they should have. But after he died the people held a council, and talked it over among themselves to decide what they could do. Some of the people had gone north, south, east, and west, and some had gone up in the sky or down in the ground. So they considered what they could do. Some

[179] Moila, moon; achohax (x German ch), adjective, born; achohahup moila, it is born moon, there is a new moon.—S.

thought they could do the same as Ouiot, die for a time and then come back; but they could not do this. Some thought the deer would be good to eat. They could kill him and have a gathering and have that meat to eat. They spoke to Deer about it, but he said, No. He was a shaman and very powerful. He had something in his nose like the black asphalt on the seashore,[180] and this would protect him.[181] They gave up killing him when he said that.

Then they laid on the ground one of the sacred stones,[182] wiala, enormous crystals, and said they could kill him with them. But Deer said, No, he had some of that too, and they could not kill him with them.[183] Then they laid down one of the eagle-feather skirts, Pahlut,[184] and said they could kill him with that. He said, No, he had some of that too.[185] Then they put down tobacco, Pivat, and said they could kill him with that. Deer said, No, he had some of that too, and they could not kill him with that.[186]

Then they laid down some "wild bamboo," the kind that grows at Warner's Ranch and they use for arrows, huikish,[187] and said they could kill him with that. He showed them that the bones in his nostrils were like that, and said they could not kill him with it.

Then they laid down arrows already made with flint points fastened to them; so then he had no more to say. He gave up. So they killed him with bow and arrows, and ever since the people have used them to kill the deer; and they skinned him and took the bones of the leg for awls to make baskets. They gave them to Wahawut,—not the one that killed Ouiot,—and she made a good-sized basket in which to collect the bones of Ouiot, and after that they always used the baskets in ceremonies. And they killed

180 Sacred as a Chungichnish object, and one of the First People.

181 The shiny black on the deer's nose is like that.

182 Two of these stones I have seen are of white crystalline rock in round shape ten inches or so in diameter, others of clear quartz (?) crystal, ten inches long.—Wiyala, rock crystals.—S.

183 The white fat of the deer looks like that.

184 Pa'lut.—S.

185 The deer's entrails are like that.

186 There is some bushy hair on the deer's hind leg near the joint that smells like tobacco.

187 Huikish, *Elymus condensatus,* from which arrows are made.—S.

other animals besides the deer. They killed acorns,—they were people then,—and killed all that they now have to eat. These turned into animals and seeds, acorns and plants.

Eagle was a big man, a great "hechicero," then, and they told him they would kill him to have ceremonies. But he said, No, it was not right. He was a person of importance. When they told Eagle they were going to kill him, he thought he could get away from them, for he was very wise and knew a great deal. So he went north, thinking that from there he could get entirely away from this world, reach its limits and fly away; and he tried it everywhere, but could not do it. He thought he could live forever and keep away from death, but there was death, Pikmakvul,[188] wherever he went. Then he went east and did the same thing, and south and west the same, and then he came home to the center and stayed there. He had to die. There was no death before this time.

By this time the people's council was concluded. Wahawut had finished her basket.[189] She had been working all the while and had lost no time. So they gathered the bones and put them in the basket to carry them, and they put the bones into a stone mortar and ground them, and added water and made it into a kind of mush. When all was well mixed they made a hole in the ground and poured it into the hole and buried it. The crushed bones were not contained in any vessel.[190] They made the solemn guttural invocation with waving motions to the north and all the other points of the compass, to send Ouiot's spirit up to the sky; and since then the people do the same thing when they have the ceremonies for the dead.[191]

When the people scattered from the place where Ouiot died, all the tribes had names, but many are dead and few living. He

[188] Cf. *ante*, under "Ceremonial Songs," records number 391 and 410.

[189] Note the different statements in each story as to who was the first basket-maker, showing a possible family descent in stories, as is the case in songs.

[190] I have not found among the Luiseños any allusion to the burial ollas for containing the bones and ashes of the cremated body so common among the Diegueños.

[191] In former times they burned the bodies of the dead. Salvador, seventy-five years old, never saw this, but his grandfather did. They burned the bodies in a certain place, digging holes in which they made the fire and burying the ashes in the same place.

does not know the name of this tribe. These Indians (the Luiseños) are called by themselves Western Indians.[192] When they scattered, the people traveled about, two or three families together, and they claimed the places where they stopped for a time,[193] and a great deal of fighting came from this. Other groups coming after would occupy the land claimed by the first. The La Jolla people would fight the Potrero people. A man could not go from La Jolla to San Jacinto without being killed by some enemy.

LUISEÑO CREATION.

Fourth Version—By Lucario Cuevish.[194]

The first that came or appeared was Kivish, the man, Atakvish, the woman.[195]

Then Omai, the man, Yamai, the woman.[196]

When the two beings found themselves there, realized the existence of each other, the brother and sister each said to the other, "Who are you?"

The man called her sister. But when the thought of marrying her came to him, he changed the form of address and spoke to her in a different way. The woman asked, "Who are you?"

He answered, "Kivish no, Kivish no, Kivish no, Han-n-n-n-n. (I am Kivish, I am Kivish, I am Kivish, groan used in sacred narrative and ceremonies)."

The man asked, "What have you to say?"

She answered, "Atakvish no, Atakvish no, Atakvish no, Han-n-n-n."

The inquiries being repeated, he said, "Omai no, Omai no, Omai no, Han-n-n-n."

She said, "Yamai no, Yamai no, Yamai no, Han-n-n-n."

There was now a transition impossible to explain.

192 It is remarkable that the Diegueños as far south as Manzanita also use this name in their language for themselves.

193 See the account of the munival, or songs of landmarks, below.

194 An old man, blind from his youth.

195 See the preceding version for names not commented upon here.—Ed.

196 Omai, to not be, said of animate things; yamai, same, inanimate.—S.

Whaikut Piwkut was the man, the sky or Milky Way, whitish-gray. Harurai Chatutai[197] was the woman, the earth.

Another transition and they became Tukmit, the sky, Tomaiyowit, the earth. These came after and from the previous states of existence, but were not born of them as their children.

The woman lay extended, her feet to the north, her head to the south. Her brother sat on the right hand by her side. "Sister, you must say who you are," he said. She answered, "I am Tomaiyowit." She asked, "Who are you?" He answered, "I am Tukmit." Tomaiyowit now, in a marvelous recitative, enumerates her attributes which it is distinctly explained do not belong to her but are prophetic of the completed state of being which is to come later.[198]

"Non Obkit, non Opaykit, I am that which stretches out flat or is extended (from horizon to horizon).[199]

"Non Yaramul, non Kworamul, I am that which shakes, and sounds with a loud noise, like thunder.[200]

"Non Yinkit, non Yenankit,[201] I am the earthquake.

"Non Punkit, non Choykit,[202] I am that which rolls around and is round in shape.

"Non Manakit,[203] I am that which goes out of sight and appears again." *After things were in shape it would be this way.*

Then Tukmit spoke:

"Non Tukmit, non Pamkit, I am that which arches over like a round lid or cover.[204]

197 Harurai chatutai; this phrase speaks of boring a hole and lowering. —S.

198 Much in this mythology is abstraction, belonging to the domain of metaphysics. Transition in character of being or condition, while identity or continuity is asserted, and the latent possession of attributes to be manifested in future time in the external order of Nature, are ideas above the ordinary.

199 Non obkit, non opoikit, I am stretched out. This and the following sentences were spoken to Tukomit by Tamaiyowut, it is said.—S.

200 Non yaramul, non kwomamul; meaning, that shakes and makes noise. —S.

201 Non inkit, non ngenankit; from ini, to deduct, take off, and ngeni, to be an earthquake.—S.

202 Non punkit, non chorkit; from puni, to go around, and chori, to roll.—S.

203 Non mane'kakit, I disappear.—S.

204 Tukomit speaking to Tamaiyowit: Non Tukomit, non pemkit. Pemkit from pemi, to be upside down.—S.

"Non Yumkit, same meaning.[205]

"Non Hetkit, non Kariamul, I am something that goes up high, and will rise high.[206]

"Non Somkit, non Paikit, I am death, that which will devour as if by taking all in, in one bite.[207]

"Non Hakwit, non Lamkit, I am he that from the east catches the spirits of men and sends them away off.

"Non Wokumal, non Chorumal,[208] I am death."[209]

They said all this while she lay there and he sat by her side. It was in darkness, but he felt her and took her right hand. "What part of your body is this?" "That is my right hand." "And this?" "My left hand." In the same way he felt and she named her head, hair, the parting of the hair, the skull, the temple, brows, eyelids, cheek bones, teeth, etc. This is an extremely long enumeration, ending in that part of the story which the narrator omits from motives of delicacy, but which Boscana gives briefly in his version of the same myth among the San Juan Capistrano Indians as follows: "The brother wished to marry the sister but she resisted, reminding him of their affinity. In due time, however, they were married."

She was with child and so large that she must lie down, falling backwards. She looked for something to help her, and Tukmit to deliver her took Sivut paviut, the sacred stick with flint knife inserted in the end of it, and with this he cut her open from between the breasts downward. (Groaning recitative.) Then came forth her children in the order of their birth.

1. *Yula Nahut.* Yula, spirit, literally, hair; nahut possibly should be wanawut. Yula wanawut is the sacred string used in connection with the toloache ceremony and sand-painting.[210]

2. *Chakwut Wakut.* Chakwut, a woven basket carried on the end of a cane by the men and used to cover the faces of the girls

[205] Non yumkit; perhaps related to yumu'i, to put on a hat.—S.

[206] Non ketkit, non kareamul; perhaps from the verbs heti and kare'i, to rise.—S.

[207] Non shomkit, non pakit; from shomi, to devour, pai, to drink.—S.

[208] Non wokamul, non choramul; woki, to cut; chori, to cut, cut off.—S.

[209] These words are used in the fiestas for the dead, and are always the final words.

[210] Nahut is waking-stick, cane.—S.

to keep the flies from them[211] in their puberty ceremony.[212] Wakut, curved throwing stick for killing rabbits.[213]

3. *Nosish Ayaraka.* Nosish, the red scum on iron springs. This was sacred because it was skimmed off, burnt, and used for red paint in the sand-painting and elsewhere. Ayaraka, the green scum, fresh-water algae, that appears on water when Tomaiyowit, the Earth-mother, has her menses.[214]

4. *Pala Yowhala.* Pala, water; yowhala, mud.[215]

5. *Ushla Pikla.* Ushla, wild roses; pikla, wild blackberry. Almost all, if not all, thorny, stinging things belonged to Chungichnish, being his avengers.[216]

6. *Nenexel Pachayel.* Nenexel is a brush that grows on the mountains; pachayel is a sedge or plant that grows in wet places, the root of which makes large clumps.[217] They were sacred because they were the plants used in the girls' ceremony to cover them with or to line the hole, or both.

7. *Simut,* double not given. Simut is salt grass on the seashore.[218]

8. *Poöla Poaskatu.* Both words mean menses.[219]

These were the first born. Then came forth all the hills, trees, stones, rocks, and everything that we now see on the earth, but all were people then. There were born, not given as doubles:

9. *Hunal,* the badger.

10. *Yungavish,* the buzzard, and meaning also the star Altair.

11. *Takwish,* the large meteor sometimes seen in the daytime, Diegueño Chaup or Shiwiw.

12. *Choruwut,* an underground animal that has never been seen, but which can be heard growling and shaking the stones in certain places in the mountains.[220]

[211] If analogy with the customs of other California tribes holds, it was primarily for the purpose of concealing the face of the girl, or hiding the world from her sight to prevent its being harmed by the supernatural power in her.—Ed.

[212] Cha'kwut, a rush basket.—S.

[213] Wakut, throwing stick.—S.

[214] Moshish, oxide of iron from springs; ayaraka, pond-scum.—S.

[215] Pala, water, yuwhala, mud.—S.

[216] Ushla, wild rose; pikwlax (x German ch), blackberry.—S.

[217] Nenexyal (x Spanish), tussock grass; pachayal or pachayat, a coarse grass or sedge.—S.

[218] Shimut, salt grass; shamut, grass of any kind.—S.

[219] Poaulo, her menstruating; poashkato, same.—S.

[220] Chorwut, a water animal.—S.

13. *Towish,* the spirit. When a man dies he becomes Towish.[221]

14. *Kwila,* an oak tree with edible acorns.[222]

15. *Pauhwhut Abawhut.* Pauhwhut, a painted board about four feet long, kept hidden in the house. If anyone is sick, punished by Chungichnish, they get it out and lay it on the ground in ceremonies.[223] Abauhwhut or Abawhut, definition obscure.

16. *Kimul Chehenish,*[224] definition given obscure.

17. *Poblish,* a tree.[225]

18. *Isla,* a person.[226]

19. *Masla,* a fern.[227]

Then came forth the avengers and special messengers of Chungichnish.

20. *Sowut,* the "black" rattlesnake.[228]

21. *Mekus,* the "yellow" rattlesnake.[229]

22. The spider.

23. *Palahush,* the tarantula.[230]

24. *Awialut,* the raven.[231]

221 The Catholic Indians, learning of the devil, identified him with Towish and still have songs and charms drawn on the ground as a form of exorcism, but these are modern and not genuinely Indian. The primitive Luiseños and Diegueños appear to have had no idea in any way approaching this. They seem to have learned their fear of Takwish, the meteor, from the Cahuillas, though this is not certain. They sometimes combine the names, Towish Takwish. The Chungichnish religion was a religion of fear, as its exacting ceremonial if not obeyed would bring punishment from the many avengers of Chungichnish, but it does not seem that this fear was ever concentrated in one being until the priests taught them to identify 'Towish' with 'devil.' The old narrator has separated his double names in this part, and has perhaps forgotten some. As all the sacred and ceremonial objects were first-born people, it is no wonder that each narrator gives a different list and forgets many.

Touch, given by Boscana, pronounced To-ush, is not far from Towish. Boscana defines the word as "devil" which is the modern Indian significance of Towish, the original meaning being spirit. Tacuieh, as given by Boscana, defined as meteoric appearance, is evidently a misprint for Tacuich, pronounced Takwish.

222 Kwila, *Quercus californica.*—S.

223 Cf. no. 11 in the list of the first born in the preceding myth.

224 Cf. no. 4 in the list of the first born in the preceding myth.

225 Pavlash, mountain ash.—S.

226 Isla, a plant.—S.

227 Nashla, large brake fern.—S.

228 Showut.—S.

229 Me'kash, generally called red rattlesnake.—S.

230 Pulakwush, the tarantula-hawk, a large insect. Tarantula is monawut.—S.

231 Kawialwut, raven.—S.

25. *Hunwut,* the bear.

26. *Wulamul,* the stingaree.[232]

Then the sacred objects:

27. *Tukmul,* the flat winnowing basket sacred to Chungichnish, placed upon the ground in the ceremonies.

28. *Somkul Papawish.* Somkul, urine; papawish, mock-orange plant, also called Näxish.[233] These two names make a double because in the ceremonies when the stone bowls and so on were placed upon the ground, urine was sprinkled over them with the branch of the mock-orange plant.[234]

29. *Topal Tamyush.*[235]

The raven was the especial messenger of Chungichnish and was able to tell the secret transgressions of those who offended against him, revealed the secrets, made mistakes in the ceremonies, or disobeyed the rules of life; but it was not everyone who could hear what the raven said. It was only the shamans of greatest power, those who could hear and see everything and kill a person at a distance.

Tukmit and Tomaiyowit now made the land, only a small piece at first. Then later they made it larger just as it is now. Everything now came into shape just as it had been named and planned in the conversation between Tukmit and Tomaiyowit. Everything was all in the dark. The First People could just feel each other but could see nothing.

They traveled east till they came to Epyuvokala Putwalakala, a place that was just like a blank wall in front of them;[236] so they turned around and came back to the same place.

Then they came to Kawima[237] Putlalak,[238] near San Bernardino, where they got to a cañon that they could not go through.[239]

232 Wulamul, stingray.—S.

233 Shomkul, a sea fish; papaiwish, urine, more polite than shiish; nehish, mock orange.—S.

234 This would seem to the Christian priests the devil's derision of holy water. It long antedates the arrival of the priests.

235 See number 1 in the list of the first born in the preceding myth.

236 Poyuvakala, it growing dark, from yavi; potowalakala, it beginning to grow dark.—S.

237 Kawima, little hill.—Kawimai.—S.

238 Poxlalah (x German ch), his climbing, from verb élali.—S.

239 See song record 407 above.

Then they came along by Elsinore, and stopped there, and made the lake that is there.[240] They traveled as far as Temecula, called Ekva Temeko, and stopped by a small lake that used to be there, but it is drained out and dried up now.

Then they began to think, to gain consciousness, and could now talk to each other, and discuss what it was best to do. Now Hainit[241] Yuinit[242] made the sun. This means something way down in the ground.[243]

This man, when he made the sun, took the reddish milkweed plant that twine is made of, and twisted the fibres of it into twine, and out of that made a net, not an ordinary carrying net, but a long one. Then he called all the people and they got together in a place near Temecula.[244] He took the net that was all rolled up, and with groaning invocation he laid it on the ground, and all the people standing in a circle bent over and placed it before them on the ground. They sang about Temet, the sun, and putting him in the net, they raised their arms with the appropriate groans, cries, and gestures, and sent him up into the sky as the sun:

Temet kwon na num, temet kwon na num, temet kwon na num, han-han-n, han-n-n.

He went to the north, but that was not right and they placed him in the net again.

(Same recitative, words slightly varied.)

He went south, but came back again.

(Same recitative, groans, and gestures.)

He went west, but went a little way and came down again.

Temet kwon put ya, temet kwon put ya, temet kwon put ya, han-n-n, wahha, wahha, wah-ha-a.

They sent him east, and he went up in the sky and away off.

(Expressive gestures, arms raised towards the sky.)

(Another recitative invocation). They made it so that he

240 See Diegueño Creation myth. Jour. Am. Folk-Lore, XIV, 181, 1901.

241 Hainit, headband to hold feathers in place.—*Ibid.*—S.

242 Yunenkit, from yuni, to dive, sink.

243 There is a song for this but it belongs to the Calacs, and Lucario cannot sing it. It descended to the Calacs from some dead ancestor.

244 It is a place that can still be seen. The rocks and trees are all around in a circle, and stones are left there in groups of threes just as they used them for cooking their food, and heaps of ashes are found there.

would not follow in a straight line, but work southward or northward at different seasons of the year.

Song, Temet karia. The sun should rise.[245]

He rose. All was light, and the people could see each other. Tukmit said that some of the children should go north, others east, south, and west. So he divided them in this way. They had had only one language, but when they scattered he gave them different languages. He also gave them their religion. He sent the Diegueños and others south with their language, and to the west he sent those of Capistrano, and so on, with their language, and in the center he left us (the Mountain Luiseños), with one language from Temecula to La Jolla.

Before the people, the tribes, were scattered north, south, east, and west, Moyla,[246] Ouiot, was there. Because he disliked the shape of Wahawut, the frog, she killed him. He only thought about her, but as she was a witch she could tell his thoughts; so Ouiot got sick and called his people from the north to come. He was very sick, and when they came they tried to find out what was the matter. They were witches and thought that they could cure him, but they could not tell what was the matter. Then the people from the east, south, and west came and did the same thing.

Ouiot got worse, and was paralyzed so that he could not walk, but crawled around and grew worse and worse. The hawk, Mawhala,[247] came to doctor Ouiot, and he was the only one who could tell what was the matter with him. He said that Wahawut was killing him by witchcraft. Then the people found out that Wahawut was doing that.

Ouiot knew now that he was going to die, and he mentioned all the "months" in a series, saying in each that perhaps he would die in that one. The last one, Soymamul, meant that he would die and take all with him (in death).

Chehemal was a good man, and Ouiot had confidence in him, so he called him and told him that he would come back in three days. After he died, all his people were gathered there and they

[245] Temet, sun; kare'i, to rise; temet-up kare'ak, the sun is rising.—S.

[246] Moon.

[247] Mawhala, a large hawk that soars much.—S.

did not know what to do, whether to burn or bury him. They decided to burn the body. The kangaroo-rat lost no time but went to work, and kept himself busy making a carrying net in which to lift Ouiot. An old woman, now the glow-worm, had some fire hidden under her arm. They first of all dug a shallow hole and put wood in it. Coyote was always a mean sort of fellow, and the people suspected him and made an excuse to send him away while they burned the body. So they called him and told him he was the quickest man and he must go north to get some fire. He did not want to leave. Se he started to where the First People lived in the north. But he did not go all the way, only ran a little way and came back, saying he could not get any fire there. So they sent him in turn to the people in the east, south, and west, but he came back each time without any fire. There was a big log lying there which a dozen men could not lift. When Coyote had gone off, Wiskun, now the chipmunk, went out and got the log, singing a groaning recitative, lifted it, and carried it over to where Ouiot was. As soon as they got it ready, the kangaroo-rat brought his net, and they put Ouiot in it, and he carried it over to the place of the burning. He could hardly walk but staggered under his load. Then they took half of the log, slightly hollowed out, mavakal, and laid Ouiot on it. He had no clothes, but upon his breast was laid the dressed and decorated skin of the crow (raven?). Over him they put the other slightly hollowed piece, avakal. They started the fire, and while it was burning they stood close together around it so that Coyote could not reach the body. The badger was a little man and he was standing there in the circle. The body was burned all but the heart, and when Coyote got there he ran around the circle stretching himself and peering over to see what he could do. Then he ran back to get a start, took a running jump forward over their heads, got the heart, and ran off with it in his mouth. They clubbed him well, but he got it just the same. Then when everything was burned, they gathered the bones and held a council to decide what they should do.

The eagle was a very wise man and he knew a great deal; and he thought he would go north to try to get away from death, as he found there was to be death after Ouiot died. When he

went north he found that death was there, and east, south, and west the same. When he came back he told the people that death was everywhere. It was very close. They had all to die. He sang this at Temecula.[248]

Then they wanted to kill the deer, but he said, No, that was not right, for he was just the same as they were. They told him they would kill him with the sacred stones. He said, No, he had the same. Then they got a stone arrow-straightener and said they would kill him with that. He said, No, he had that too. They said they had the feathers for the head-dresses and would kill him with them. He said, No, he had some of them too. They showed him arrowheads and said they would kill him with them. He said, No, he had those also. They showed him a bow and said they would kill him with that. Deer said he also had that. They told him they had sinew and would kill him with that. He said, No, he had that too. They told him they would kill him with blood. Deer said, No, he had that. They told him they would kill him with the tracks of their footprints. He said, No, some of those were his too. They told him they would kill him with marrow. Deer said, No, he also had marrow. They told him they would kill him with their ears. He said they could not do that. He had ears too. They told him they would kill him with their eyes. He said, No, he had eyes too. They told him they would kill him with the skin of the deer's head and antlers worn on the head by the hunter to deceive the deer. He said, No, he had that too. They told him they would kill him with tobacco. He said, No. He had some of that too. They told him they would kill him with wood-ticks. He said, No, he had those also. They told him they would kill him with one of the big blue-flies. He said, No, he had that too. Then at last he gave up when they told him they would kill him with the feathers that wing the arrows.

So they killed the deer, and all the different kinds of rabbits.

Then the valley quail and mountain quail and road-runner and woodpecker mourned and cut their hair for mourning.[249] They were the first to do this, and the Indians still mourn in this

[248] See song record 391 above.

[249] All birds with a plume or crest.

way in some places, cutting their hair for the dead. Chehemel, kingbird, was the only one that knew that Ouiot was coming back, and when the day came he got on his housetop and said, "Ouiot is coming." Some of the people said, "How can that be? He is dead." Kingbird said: "Come. Look in the east. Karia Ouiot, Ouiot Moyla, Rises Ouiot, Ouiot the moon." All came out and saw him in the west. Kingbird alone saw him in the east. All shouted out, and every time after that when they saw the new moon they would start a fire and have races.

ORIGIN OF THE NOTISH MOURNING CEREMONY.[250]

The Sea-fog, Awawit, was the one who started the Notish ceremony. He was one of those who arranged all the ceremonies after the death of Ouiot. He was the one who had to provide the food and to call all the people together.

Sea-fog set up the kutumit pole with baskets at the top, and arranged for a contest of skill between his people of the West and those of the mountains. The Western people were sure that they could do better in everything than the people of the mountains.[251]

So everyone tried to climb the pole to get the baskets, but no one could reach the top except the squirrel from the mountains, and he climbed the pole, cut the string, and the baskets fell down.

When the mountain people went to this gathering, they took deer meat and much food, all they could carry; but Mechish from the ocean, a sea animal that crawls along, and has little hollows or cups in his shell, got a bag and got all the food in that and carried it off. So the West won in that contest and got all the mountain people's food. In the first game the squirrel beat. In the second the West beat.

Then the Western people gathered fish and other things to eat. There was a bird there from the mountains with a very big mouth (the whip-poor-will?), and the mountain people said to

[250] Told by Lucario Cuevish.

[251] The place where the ceremony was held can still be seen. It is where the trees stand around in a circle, and ashes and stones used for cooking are there. It is on the mountain ridge from Pala going towards Temecula. Compare the description of the place near Temecula where the sun was raised, given by the same informant (p. 144, note 244).

him: "It is your turn now to eat." He said: "That is nothing for me to do." So he opened his mouth and they poured everything into it, and he ate it all up. So the mountain people beat.

Then they arranged a game between the fish and the owl. They were to look straight at each other and whoever closed his eyes first was to lose. The owl and the fish sat and looked at each other, and finally the owl had to close his eyes, so he lost, and the Western people won on that.

They were getting angry over all this contest and it seemed that there would be a fight. When levalwish, the crow's skin,[252] is hung on the pole, there is to be fighting.

Then Sea-fog made a house and told the mountain people to try to destroy it. So they got the summer-cloud, Thunder-cloud, a very powerful man, to come and see if he could blow or break it down. He came, he roared and blew, but could do nothing to break the house down. So the West won. Then Thunder-cloud invited Sea-fog to come up to his house and see if he could destroy it. So Sea-fog came. A strong wind broke the trees and knocked down all the houses. So the West won again. Then they tried their skill in a long race. They went past Pala up through the mountains as far as La Jolla.[253] Some of those that raced on the side of the mountain people were the hawk, frog, eagle, raven, and chicken-hawk; and for the West, Emamul (little birds on the seashore, very fast runners),[254] the butterfly, grasshopper, and others. As they came by Pala to the foot of the mountain, at Rincon, Wasimul,[255] a kind of hawk, gave out in the race, and there he is now as a rock beside the road, right below the store. (See Ancestral Songs.) At the same time Chehuka,[256] a person, coming along in the race, gave out, and his footprint can still be seen in the rock. When many of the racers had given out and died, or stayed behind, the eagle and the raven and the chicken-hawk, Mountain people, were ahead; and the grasshopper and

252 Levalvush, wide; a rare word.

253 Lucario, probably on account of his blindness, is inclined to give a very limited account of distance. All the others say that this race was to be made out to the desert and back again.

254 Emamal, a small bird.—S.

255 Wasimal, a hawk that nests on the ground.—S.

256 Chahuka, a person that lived in the distant past.—S.

the butterfly, Western people, were close behind, so the Mountain people won in this race.

The last race was between the deer, Sukut, and the antelope, Tonla. This race was from Temecula to San Bernardino mountain, and the antelope beat in this, for it was all on a level, where the antelope can go fastest. So they arranged to have another race between them, and this time it was over a mountain route, and here the deer won the race.

Summer-cloud (Thunder-cloud) was glad because the deer beat, and the mountain people had won in most of the contests.[257] All these contests were made in the first Notish ceremony and ended it.

A CHUNGICHNISH STORY.[258]

Among the people living near El Toro, there was a boy who was always hunting rabbits, quail, and the like with bow and arrows. One day, near Santa Ana, he saw a rabbit which he tried to catch, but it ran into a hole in the ground. He got a stick and poked in the hole. He felt the rabbit, so he kept on digging, and went farther and farther down, every little while finding something, which, he would say, "I will take to my mother," "to my sister," and so on.

So he went on, and finally came to a place where those Chungichnish were living. They all said, "Witte,"—"Welcome"—to him, and told him to sit down. Then they built a big fire, a very large fire. The boy was very sad. He did not know what to do. There he was down in the ground among those people. He was afraid.

These people had power and could do anything. They would stand up, leap, jump, and dance moving about, jump into the fire and stand in the middle of it, the flames going up above their heads. All took turns in doing this; then they said to the boy: "It is your turn now." He was frightened, but he sang a song, a sort of invocation,[259] and then jumped into the fire. He felt

[257] It is evident that certain trials of skill have been forgotten by the narrator, as in his list the mountain people are not ahead.

[258] Told by Salvador Cuevas.

[259] See song record 405 given above.

no heat, and after standing there awhile he came out unharmed.

They all shouted and said, "Now you are a good Chungichnish."

This is the reason people dance in that way, jumping and moving about.

NAHACHISH.[260]

One of the Temecula people was called Nahachish. He was a chief. He used to have in his house the limb of a tree cut into a hook and fastened up to hang food on. Some people broke the hook down. He became so poor that he had nothing to eat, and did not know what to do. He sang a song.[261] He sang that he was going to leave that part of the country, but he did not know where to go.

He went to Picha Awanga, Pichanga,[262] between Temecula and Warner's Ranch, and named that place. There were a lot of people there having a fiesta, and there was plenty of food. They passed everything to him, and there was a sort of mush of a light gray color. So he said, "My stomach is picha." So they called the place by that name.

Then he went over the mountain at George Cook's to Palomar mountain. There was no one there. The houses were empty. He stood looking and peering about, and could see no one. So he called the place Chikuli.[263]

Then he went to a place, Poyarak,[264] where some of his family lived. They gave him so much to eat that he got sick and called the place Sukishva,[265] nettle. "My stomach is nettle," burns, he said. He was so poor that he did nothing but go from place to place to get something to eat.

There is a place below here where he washed his hands, and called it Kaiyawahuna.[266] He did this on a flat rock where one

260 See above under "Ceremonial Songs," record number 409.

261 See song record 409.

262 Pichaang, now Pichanga; Awa', locative Awanga, now Aguanga or Aguango.—S. Awa, present series, IV, 147.

263 Chakuli.—S.

264 Poyarak.—S.

265 Shakishva, a place on Palomar mountain; shakishla, stinging nettle. —S.

266 Kayawahana.—S.

can still see his footprints, and see where he knelt on the soft rock. There are footprints of deer there too.

He came to La Jolla and called it Huyama;[267] and the place next to that he called Namila.[268] He went in a ravine[269] and called it Sovoyama,[270] because it felt chilly.

He made a sort of whistling noise and called the next place Puma.[271]

He saw people feasting when his stomach was empty, and called that place Yapichi,[272] where the government Indian schoolhouse at Yapichi now is.

When he came to where Mendelhall lives now, the people were eating. He had a good meal there and called the place Tumka.[273]

In the cañon he drank water and called it Pala, water, and Pame, little water.[274]

He went on and came to Rincon. It was muddy there and he called it Yohama.[275]

He came to Bear Valley, where he fainted from hunger. He called it Nakwama.[276]

He came to the water. He had something with him in a basket, and this he threw out, and it still grows there in the water, a sort of greens, called Mawut.

Then he went below Pala to a place where they ground pinole for him so fine that he could not handle it, and was disappointed. They mixed it with poison to kill him. It made him sick, and he traveled toward home. He died on the way, and turned into a rock which still stands near Temecula, two or three miles south.

They say that a priest once went out and baptized this rock because the people told him it was a man.

[267] Huyamai, a place, not La Jolla.—S.

[268] Namila, a place near La Jolla.—S.

[269] A ravine between the Mission house and Leandro's place.

[270] Sovoyamai, where the La Jolla schoolhouse now stands.—S.

[271] Pumai, a hill on Potrero rancho.—S.

[272] Yapichi.—S.

[273] Tomka, valley on Potrero ranch.—S.

[274] Pala, water; Pamai, in San Luis Rey cañon above Rincon.—S.

[275] Yuhwamai, muddy place, near Rincon; yuhwala, mud.—S.

[276] Possibly Makwimai, a place near Rincon.—S.

THE SPIRIT WIFE.

Some years ago the people from the Potrero district used to go up to an old village site on Palomar mountain, Pahamuk,[277] near where Bailey's place is now, at the season for gathering acorns; and while they still lived there, a young man abused his wife. He scolded and beat her all the time, and she was always sad. She got sick and did not want to live. She would rather die.

She had a little baby boy just beginning to crawl. Soon the woman died, and the man was left alone with his baby. He had to carry the baby about with him all the time, and the baby cried.

The man went up the mountain to gather acorns, and left the baby lying under a tree. The baby cried and cried, until at last the spirit of the mother came and took the baby in her arms.

The man came down the mountain and found the woman there. She spoke to him and said that he had been so cruel to her that she had had to leave him; but that now he must never be unkind to her again. She had come back to him because he and the baby were suffering without her. She could stay with him as long as he was kind to her, but no longer.

So he promised never to treat her harshly again.

She used to make the wiwish, acorn mush;[277] but it was never good. It was always watery. The man was sure he would never abuse his wife again. But when she made the mush just as she used to, and it was thin, he acted as before and lifted his hand to beat her.

"You promised not to be angry," she said, "but now you are doing the same as formerly. I see that you cannot be trusted to be good. So now I shall have to leave you." With this she turned into a dove and flew away.

The man fell on his back; and he and his baby stayed alone.

[277] *Ibid.*—S.

THE DANCE OF THE SPIRITS.

There were two large villages in old times, Kamak, where Potrero is now,[278] and Ahoya near where Sparkman's store is at Rincon,[279] where one leaves the sycamore trees.

When it was time to gather the acorns, all the people of Kamak left their houses empty and went up on Palomar Mountain.

An old man named Pautovak came up from Ahoya, and stopped at Kamak, thinking he would stay all night and go on in the morning. He took one of the enormous storage baskets, mushkwanish,[280] that was empty, inverted it over himself for shelter, and went to sleep.

Early during the night he heard people call out the summons to a dance. He lay and listened.

There were children among the people, little boys, and they came near the granary basket, and there was a torn place in it where the toes of the old man were sticking out. The boys said "the devil" (a spirit) was there, and ran away.

The old man could recognize the voices of men and women who had died long ago. He could hear the spirits talk and hear them laugh. One was Exwanyawish,[281] the woman that was turned into a rock, and Piyevla,[282] the man that scooped the rock with his fingers.[283] Piyevla sang that night all the songs that had been his when alive.

The old man could hear the women's songs as they danced. He lay awake all night and listened; till at last, just before dawn, he could not wait any longer, but determined to see them for himself; so suddenly throwing off the basket, he said, "Hai, are you there?" and immediately all the spirits turned into a flock of birds and flew away; and the turtle-shell rattle they had used all night for the dancing he found where they had left it, but now it was nothing but a piece of soaproot.

278 Kama', near Potrero; Kuka, a village near where Potrero now is.—S.

279 Ahuya, old village site above Rincon on road toward Potrero.—S.

280 *Ibid.*—S.

281 Exvongawish (x German ch), of Exva.—S.

282 Peyevla, large basket; a hole in a rock at Potrero.—S.

283 See below, the account of ancestral landmarks.

THE SPRING BEHIND THE CEMETERY.

A man was going out to get some yucca, and went to the spring. He had a stick in his hand, and he dropped it into the water, and it sank so deep he could not get it. He was a witch, so he went down under the water to look for the stick.

And he came out into a place where a man and woman lived who sat there making baskets.

"Who are you, cousin, and where do you come from? What are you doing here?" they asked.

"I live up there, and I came down to look for the stick which I lost."

He stayed there three days. He was very thirsty, so the woman gave him a little shell full of water. He drank and drank, and still the shell was full of water. He was hungry and they gave him honey to eat.

Then he began to wish for his home, and the man who lived there saw that he wanted to leave them; so he said he might go if he would promise never to tell where he had been. If he told this secret the rattlesnake would immediately bite him and he would die. So the man promised not to tell, and they painted him all over and pushed him out, and he found himself in his own home.

His wife and his brother asked where he had been, but he would not tell them. His wife was determined to find out, and gave him no peace day or night until at last he consented to tell her.

"I shall be killed for telling this," he said, so he called all the people together and told them he must die; and he wanted them to burn his body in a certain open level place where there was no water; but after his ashes were buried there, water would come up and there would be a nice spring.

So he went out of his house, and a rattlesnake was there which bit him, and he died.

The people got wood for the funeral pile, and burned his body and buried his ashes. There was no water in this place, but two or three days after there was a spring of water there. One can see it now behind the cemetery, and fresh coals, pieces of charcoal, are always rising where the water bubbles up.

THE WALKING TAMYUSH.

... sacred stone bowls, were never made. They ... first people, born of the Earth-mother. If the ... they are, does not take good care of them ...

... seen going along the road, and one can follow ... just. It is like a rattlesnake track, but broad-

... lately came there. A raven was seen flying ... road, and every now and then he swooped down ... some object. A man went to see what was there, ... Tamyush. It had been coming along the road to ... took it to his home and they had a big ceremony ... man is dead now.

HOW COYOTE KILLED THE FROG.

... going along. He was a man then, and had a bow ... came to Wahawut, the frog, who was making a ... basket.

... her with his bow and arrows; and she ... "Brother, I believe you are thinking of killing me." ... he was thinking.

... "No, I am not."

... "If you shoot me with your arrow, wherever ... will run out and drown you."

... believe it," said Coyote.

... his arrow and shot her, and ran away as ...

... arrow struck her, the water began to run out. ... tree" and climbed into it; and the water reached ... lake around it. It rose and rose, and Coyote ... into the tree. He felt that he was near his ... singing about his brother, his relatives, and ...

... tall green tree.
... above.

The birds came close about the tree, and told him that if he jumped down they would catch him on their backs and carry him safe to land. He believed them, jumped from the tree, fell into the water, and was drowned.

THE FLOOD.[286]

There is a wonderful little knoll, near Bonsall, the Spanish name of it Mora, the Indian name Katuta;[287] and when there was a flood that killed all the people, some stayed on this hill and were not drowned. All the high mountains were covered, but this little hill remained above the water. One can see heaps of sea-shells and seaweed upon it, and ashes where those people cooked their food, and stones set together, left as they used them for cooking; and the shells were those of shell-fish they caught to eat.[288]

They stayed there till the water went down. From the top of this hill one can see that the high mountains are lower than it is. This hill was one of the First People.[289]

[286] Told by Lucario Cuevish.

[287] Or Katuktu; see song records 395 and 398 above.—Katukto.—S.

[288] The hills near Del Mar and other places along the coast have many such heaps of sea-shells, of the species still found on the beaches, piled in quantities.

[289] See song record 398, above.

TRADITIONAL KNOWLEDGE.

ANCESTRAL LANDMARKS AND DESCENT OF SONGS.

After the water dried, the people went on to Kalaupa,[290] and killed a bear there, and held a council whether they should go any further. They decided to go on, and went to Elsinore where the lake is. From there they scattered, north, south, east, and west, in parties as they are now. The people of La Jolla stayed in one place; those of Rincon in another, and so on. When they scattered in this way they composed the songs about their travels and the different places where they stopped. These are the songs of Munival.

When the people scattered from Ekvo Temeko, Temecula, they were very powerful. When they got to a place they would sing a song to make water come there, and would call that place theirs; or they would scoop out a hollow in a rock with their hands to have that for their mark as a claim upon the land. The different parties of people had their own marks. For instance, Albañas's ancestors had theirs, and Lucario's people had theirs, and their own songs of Munival to tell how they traveled from Temecula, of the spots where they stopped and about the different places they claimed.

Wasimul, one of the Temecula people, who is now a small flat rock at Rincon in the field below the store, was one of Pio Amago's ancestors, and he has a song about it. It mentions Temecula and mentions Wasimul. Lucario cannot sing this song because it does not belong to his family.

Piyevla,[291] the man who scooped out a rock on the hill near Albañas's house at La Jolla, was one of Lucario's ancestors; and the turtle rock in the same locality was brought from Temecula by one of Lucario's ancestors and left there. The oak tree growing on this rocky knoll was called long ago Pecheya, sacred feather headdress. (Pl. 4, fig. 1.) The place itself is called

[290] Kalaupa, mountain near Santa Margarita.—S.

[291] See the story of the Dance of the Spirits, *ante*.—Peyevla, a hollow rock near Potrero.—S.

Popikvo. The sliding place on a large rock in Trujillo's field adjoining Popikvo, was made smooth by Lucario's ancestors sliding on it.

One of the most striking rocks in this locality of ancient monuments is the painted rock, Exwanyawish[292] which was one of the Temecula people, a woman, who turned into this form. Indians suffering bodily pain rub against the rock to obtain relief. It is not known when the painting on the hollowed side was done, nor when the sacred stones, wiala, were poised on top. The oldest man remembers that they were always there, though the touch of a hand might overturn them. Pl. 4, fig. 2.)

In those days they used to sing songs to kill each other by witchcraft, and Lucario knows these songs. He has one of them which mentions the turtle rock, and tells how it was left there.[293] The large flat rock is divided by cracks which resemble the marks on the turtle's back.

Lucario is the last of his line, party, or clan, and everything sacred will be lost when he is gone, as the succession in these things ends with him. He is dispossessed from his ancient home place, which was allotted to another.

Each man knows the migration route of his ancestors, and claims certain localities as having been theirs. They did not travel great distances, according to tradition. Salvador says that when the people scattered from Temecula all the tribes had names, but many are dead and few now living. He does not know the name of his own tribe. They are called by themselves Western people.[294] When they scattered, the people traveled in parties of two or three families, and they would claim the land where they stopped, though they might have left it and gone further and others might have occupied it later. This led to a great deal of fighting. The La Jolla people would fight the Potrero people. A man could not go from Potrero to San Jacinto without danger of being killed by some enemy.

The family songs of Munival mention the marks made by the earliest Temecula people when they took possession of certain

[292] Exvongawish (x German ch), of Exva, a place near Temecula; Exvayam, people of Exva.—S.

[293] See song record 396, above.

[294] The Diegueño also give themselves this name.

localities. Every family or "party" had its own songs, and no man is allowed to sing a song belonging to another family connection. It would be an unpardonable offense against custom. Lucario was quite indignant when it was suggested that his song of the eagle dance might have been heard at Mesa Grande. One of the songs in his version of the creation myth belongs to the Calacs, so that he could not sing it but only refer to it.

The subject matter of the song series in all the lines of descent or "parties" is the same. All the singers have songs mentioning the same places and subjects; but Juan de Dios's song of Ouiot, for instance, would be entirely different from Lucario's in tune and arrangement.

This may also account for the variation in the myth versions, as the songs are part of the story, and the rigid separation of songs among family groups must have resulted in certain differences in the transmission of traditions.

Inheritance in these unsubstantial things is strictly observed until the family line is extinct. My Indian driver once pointed out a distant cliff of gray rocks, tall and forbidding, far from a human habitation, and informed me that an eagle had its nest on that cliff, and that this eagle belonged to Maria Subish.

This means that she is the last of a line in which the possession of this eagle eyrie was hereditary. The old eagle never dies, it is thought, hence may descend as the songs do. The young ones from this locality may have been caught for the performance of the eagle ceremony in this family.

CLANS OR TRADITIONAL GROUPS.

At the present day no trace of tribal consciousness exists; but a division can still be traced into what may be called clans; though the little information gained is so vague in character that no definite conclusion can be based upon it.

The interpreter thus tries to explain the division into these parties or clans. José's uncle has one name, and José's father has another; but the latter and others belong to the uncle's "party." They do not have to be related, but anyone can join the party who wants to. It is like church membership, he says,

or like Masons and Oddfellows. Some chiefs did not have many ceremonial objects, and did not perform any ceremonies; but to José's uncle descended the hereditary performance of Mani, the toloache ceremony. In earliest times the family name was Naxyum. Now they are called Calac. When they scattered from Temecula, the Naxyum family brought their tamyush, toloache bowls, with them, and the other families did not bring any, or not many; and they brought the fire songs to put out the fire in the toloache ceremony; and they brought an eagle with them; and as they came along they put him in one of the cañons, and he is still there. They used to catch the young ones in this place for the ceremony. The Naxyum were a big family of brothers. They were all related. After they had found there was to be death, at the death of Ouiot, the Naxyum took the tamyush, while others did not take anything. They would sing the songs of Munival to tell how they traveled from Temecula to Rincon, where they now live as the Calacs.

The people from Temecula called themselves Exvayum.[295] Temecula was ruined after Ouiot died, so they scattered in groups. The Diegueños went off with a separate language when they left Temecula.

The groups were originally related, but they kept changing names, so that they have not the same names now, but have the same ancestors.

The songs show who are related. Only those of the same group can sing the same songs. José's father's traveling songs are different from Lucario's. The songs descended from father to son and the old people were eager to teach the songs to those in the same family, but not to outsiders. But if an old man is the last of his line, like Lucario, it is then permissible for him to leave his songs to another in a different "party."

When Albañas was a boy, his father was killed, and his mother died soon after. He was brought up by a circle of old people, each of whom in turn instructed him in the family songs.

Some of the chiefs had very few ceremonies, did not know much. Only the most important ones could lead the ceremonies.

[295] Exvayam (x German ch), people of Exva, a place near Temecula.—S.

STAR LORE AND CALENDAR.

The stars were those of the First People who went up into the sky in the attempt to escape from death when it became known that the death of Ouiot had brought death to all upon earth.

In the old times much more was known about the stars than at present. Songs remain containing the names of stars which cannot now be identified. It is possible that the motions of the planets were recognized, but today Venus seems to be the only one distinguished by a special name. Venus is Aylucha,[296] that which is left over from evening till morning, food or anything of the kind.

Only the most important stars have names. They were the chiefs among the First People, and they took their parties of adherents or relatives with them, which are now the stars grouped about the chief star, but without individual names.

The associated stars form much larger groups than those which we have adopted from antiquity; and when the Luiseño system is understood, there is something more impressive in it than in the haphazard arrangement of the Greeks and Romans. The oldest and most important star-chiefs, those most often mentioned, are Nükülish, Antares, and Yungavish (buzzard), Altair. The right hand of Antares, Nükülish po-ma, Nükülish his-hand, is Arcturus. Rising always in advance of Antares, it heralds his coming. All the other stars grouped around and between are the people of Antares, a large following.

In the same way Yungavish po-ma, the right hand of Altair, is Vega. The feather headdress of Altair, Pecheya Yungavish,[297] is a star close to and immediately above it.

The Luiseños regard the Milky Way as the spirit, the home of our spirits, to which they are sent when leaving the earth. The long series of songs of Kwinamish define their beliefs concerning the spirit. These songs are extremely difficult of interpretation and explanation, for they include words unused in ordinary life, and ideas that would have been puzzling in the old days to any but the initiated. The instruction concerning the things of the

[296] Eluchax (x German ch).—S.

[297] Yungavsh po-cheya, buzzard his-headdress.—S.

spirit given to the candidate in the toloache ceremony, as explained by the symbol Wanawut, has already been referred to. The exact character of this can never be discovered; nor in just what manner it symbolizes these ideas.

One of the songs of Kwinamish, already given, begins: Tomamik Yula Wanawut poponakala ponyarakala auma, to the north the spirit in carefully woven strings remains tied. The striking peculiarity in the Luiseño use of sacred terms, the doubling of the word, has been referred to. Wanal Wanawut has been explained. Yula Wanawut has almost exactly the same significance. Yula means spirit, and literally head or hair. It is possible that in ancient times the object Wanawut was made of hair, as were the bracelets and anklets used in the girls' ceremony. In the creation myth one of the first states of existence, out of which Earth and Sky came by successive transitions, was called Whaikut Piwkut, explained as something silvery gray, like the glimmering of dawn or the gray hair of old age. In one of the earlier notes made, the explanation identifies Whaikut Piwkut with the Milky Way. It is possible that Whaikut Piwkut was the pre-existing form of the Milky Way, which in that case would have preeminence over Earth and Sky. Its silvery glimmer is suggested by the term; but all this is involved in uncertainty.

The other chiefs of the first people now seen as stars of the first magnitude are Waonesh,[298] Spica; Nawiwit Chawachwish,[299] Fomalhaut; and Tukmishwut,[300] the North star. Hulaish[301] is Orion, and Chehaiyam[302] the Pleiades. These two are always named together.

Tukmishwut, the North star,[303] remains motionless, and all his people, the members of his "party," move in a circle about him. This is the reason the dancing and marching are in a circle around the sacred enclosure, the fire, and so on. His hand and heart are both to be seen in the sky. The outlines of these figures, traced

298 Waunish, a star.—S.

299 Ngoiwut chawochmush, a star.—S.

300 Tukmi iswutum pomshun, or tukmi iswut, the north star.—S.

301 Hula'chum, the three stars of Orion.—S.

302 Chehaiyam, Pleiades.—S.

303 His finger was bitten off by the rattlesnake. Journ. Amer. Folk-Lore, XIX, 54, 1906.

in tiny sixth-magnitude stars, are only to be seen in an atmosphere entirely free from moisture as well as from clouds. Three fingers are outlined, the blunt one having been bitten off; and the heart is placed among them, its point reaching to the horizon beneath. Albañas's grandfather taught him the outlines of this constellation of the North star in the evenings when the little boy sat by the hearth fire, tracing the figure in the sparks of little live coals upon the earth floor of the hut (fig. 3).

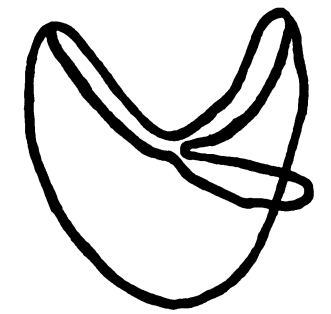


Fig. 3.—Heart and three fingers of north star.

At the time when the stars went up in the sky to escape death, the Pleiades, Chehaiyam, were seven young women, sisters; and when they went up a rope was let down for them to climb on.

Coyote came along, and as there was no man with them he said, "I will go with you, girls." They did not answer him, but he took hold of the rope and kept on going up after them. But when they were safely up, they cut the rope and Coyote fell backwards. There is always a star following them, Aldebaran, and this is Coyote.

Orion went up at the same time.

The eclipse of the moon is the physical manifestation of Ouiot's sickness when he counted the months expecting to die. When the eclipse clears off, Moyla, Ouiot, gets well again.

At the time of the eclipse they sing the songs of Pikmakvul.

The moon was sent up into the sky to watch the people and regulate everything, and all goes according to the moon. Especially is this so in regard to women who have their menses, but men are also affected by it, and become strong or weak as the moon waxes and wanes.

Mr. P. S. Sparkman in his unpublished dictionary of the Luiseño language says:

"The Luiseño year was divided into eight periods, each of which was again divided into two parts. Periods of time were not represented by these divisions, which merely indicated when certain fruits and seeds ripened, grass began to grow, trees came into leaf in the valley, or on the mountain, etc.

"The following are the divisions of the year:

Tasmoi-mal alu'mal	Tasmoyil mokat
Tauna-mal alu'mal	Tawut mokat
Tausun-mal alu'mal	Tausanal mokat
Tovuk-mal alu'mal	Tovakal mokat
Nova'no-mal alu'mal	Novanut mokat
Pahoi-mal alu'mal	Pahoyil mokat
Nemoi-mal alu'mal	Nemoyil mokat
Somoi-mal alu'mal	Somoyil mokat

"It will be seen that the first word of the name given to the first part of each period has the diminutive suffix -mal affixed to it, while the second word of the name, alu'mal, means thin or lean. Therefore this means something like the small lean part of the period. Mokat, the second word of the name given to the second part of each period, means large, therefore the second parts are spoken of as the large parts. But it is not necessary to use the words alu'mal and mokat; the other words may be used alone.

"It has been impossible to ascertain exactly what periods of the year are represented by these divisions; informants reply differently."

The names of these "months" are all taken from the physical features of different seasons. Tausunmal, August, means everything is brown and sear. Tovukmal refers to the little streams of water washing the fallen leaves. Tasmoimal means that the rain has come and grass is sprouting. In Nemoimal the deer grow fat. The "months" are marked by the rising of certain magnitude stars counted in the early morning.[304]

[304] The Diegueño year was divided into six months and the morning rising of five chief stars was noted. The names of the months are: Hutlnamashap, Hutltai, Hutlpswi, Hutlkwurx, Hutlmatanai, Hutlanaxa.

The Diegueño constellations are altogether different from the Luiseño, and based upon totally different ideas. It has not been possible to secure an accurate account of them; but it seems that there is no one consistent idea to account for them as with the Luiseños, whose superior intellectuality is shown in their power of generalization; but it is probable that with the Diegueños as with us, they represent each a different myth concept.

Orion is called Mu in Manzanita Diegueño, Emu at Mesa Grande, the word meaning mountain sheep. This apt name is given from the perfectly defined horns of the mountain sheep which can be traced on one side of the constellation as we see it, in tiny stars.

It is said that Scorpio is with the Diegueños a boy with a bow and arrow.

The Diegueño conception of the Milky Way was probably adopted by them from the Luiseños along with the rest of the Chungichnish religion.

THE ORIGIN OF MUSIC.

Music was invented in the earliest times, and Lion, Frog, Eagle, Raven, Deer, and others were the first musicians.

The instrument they used to play on was a flute made of a hollow elder stem or piece of cane, having four holes. It is extremely difficult to play upon this primitive instrument, and only one old Indian at present knows the tunes and the art of playing them.

The First People had a contest to see who could play the best tune, the condition being that the whole of each piece invented by them should be played upon the flute in one breath. So, having composed each a tune, they met at the appointed place to play in turn.

Coyote was artful enough to compose his tune with many pauses in the measure; and at each pause he would secretly draw his breath. So he won in every contest, till it came to be the turn of the Lizard, and he had carefuly watched all the time to see how Coyote did it. So when they had a contest, Lizard did just the same, pausing and secretly drawing his breath, as Coyote did; till at last Coyote forgot to do this and stopped, and Lizard beat him in the contest.

APPENDIX I.

GAMES, ARTS, AND INDUSTRIES OF THE DIEGUEÑOS AND LUISEÑOS.*

By Constance Goddard DuBois.

The Diegueños had many gambling games which were simply contests of skill. One was played by throwing a stick at a rolling hoop. Men and women had different but somewhat similar games, played by throwing sticks marked with certain figures, and counting so many for the throw, which are quite complicated and not easily understood unless illustrated. The men's game called "quince" is named from the Spanish, but is probably much older than that would suggest.

The most important game is "peon," which has almost the value of a religious ceremonial. It is played at midnight on the occasion of an Indian fiesta. A shaman should lead each side, and all his power must be exerted for the success of his village, the challengers being visitors from a distance.

Sides are chosen and money in considerable quantity is staked on the result. Wooden counters are used as in all the games to mark the score. White and black "sticks" made of bone fastened by a string are tied securely to the fingers of the players, so there can be no cheating, but all depends on skill or quickness of observation.

The players of one side, kneeling in a row upon the ground, are covered to the waist with a blanket which hides all motion as they arrange the pieces of bone upon the finger. While doing this, the better to confuse the observation of the opponents, they sway from side to side emitting the most unearthly series of repeated sounds in measured time to the accompaniment of the women's songs.

* The following notes on the culture of the Luiseño and Diegueño were incidentally obtained by Miss DuBois during her stay among them while she was engaged in the study of their religion.—Ed.

When they are ready the blanket is dropped, and the other side must guess the location of the small disk of bone concealed in the hand of the player, whose name is called while the hands are clapped and pointed with lightning rapidity first to one and then to another in the row. The points are counted and awards made by the leader or "umpire" in the game.

Gambling with the Indians satisfied that instinct for recreation and excitement which in civilized man finds expression in the countless amusements good and bad which he devises for his leisure hours. Peon is thrilling even to a bystander; but all is managed with the precision and self-restraint which is inherited from primitive days, when every act was in some sense a religious ceremonial.

As is the case in all primitive tribes, basketry and pottery rank first in importance among the industrial arts of the Dieguenos and Luiseños.

The former used pottery not only for domestic purposes, but in the form of burial vessels, ollas, for the preservation of the ashes of the dead. After the body was burned, the ashes and bones were collected and deposited in the pottery receptacle or olla, and carefully buried in some secret place. The whereabouts of some of the burial ollas are still known to the initiated. Others have been discovered by chance by tourists and collectors. With the Indians, to betray the secret would be to profane the most sacred things of their religion. Fortunately two fine specimens of these rare objects have lately been secured.[305] They were found buried among fallen granite rocks in a distant cañon of the mountains near a deserted Indian village. They contained bits of burned bones, charcoal, arrow-heads, etc.

Next in importance were the large storage pots or ollas for the seed supply of the family. The seeds, carefully harvested, were deposited in these receptacles, which were hidden among heaps of rocks in cañons or on almost inaccessible mountain sides, discouraging discovery, but allowing the members of the household to resort to this granary in time of need.

One fine specimen collected for the American Museum of Natural History was made by the grandfather of the man of

[305] See Amer. Anthr. IX, pl. XXIX, 1907.

sixty-five who sold it; and he remembers going as a little boy at night with his grandfather to this secret storehouse. This vessel was photographed, and also the inaccessible rocky hillside, near the top of which it had been hidden among the rocks.

In the Ballena district, eight miles or so from Mesa Grande, there is an exceedingly interesting painted rock which marks the site of a prehistoric village. The flat rocks near by show the round holes left by the departed grinders of seeds, grains, and acorns. But the most remarkable feature of the place consists in the circles of stones grouped on top of the hillock as if huddled together for protection against the foe.

Upon first examination it seemed that these circles had been the foundations of Indian houses, though of what material the superstructure had been made it was impossible to conjecture. They were formed of loose boulders rolled into place, and showed no trace of other building material. They were singularly small in circumference if houses were to be erected upon them.

Later the probable explanation of these circles was found in Venegas. Venegas writes: "The people near Cape San Lucas make huts of the branches of trees. In other parts of the country, their houses are only a little space inclosed with stones laid one upon another, half a yard high, one yard square, and without any covering but the heavens; dwellings indeed so scanty and mean that an European tomb would here be reckoned a palace. For within this small precinct they have not room to lie at full length; so that they sleep in a sitting posture."

This exactly describes the stone circles at Spring Hill. It would be interesting to know from what locality Venegas's description was derived, and to trace the connection between the tribes making the stone circles in Lower and Southern California.

It is evident that the site in question was abandoned in very early times, possibly before the Diegueño occupation of the country, for no tradition remains to explain these monuments.

They are described in this connection to account for a rare specimen of pottery collected for the American Museum of Natural History, an ancient vessel with a base, found on this village site. The shape is quite unlike those made by the Diegueños, who so far as known never made ollas with bases.

Venegas mentions very little pottery among the Indians of the peninsula, crediting only one tribe with the making of pottery cups. It was at one time imagined that pottery was not native to the California Indians. But it is certain that it existed in some localities from early times. Tiny pottery vessels were used in the Image ceremony among the southernmost Diegueños and allied Indians, hung in a net about the neck of the image, to supply food and drink to the spirit of the departed. Domestic utensils of every shape were made, cups, bowls, jars, and pots. A rude decoration was lately made at Manzanita, and some good specimens of small decorated pieces have been collected.

Basketry existed in great perfection in the old days.

The sacred ceremonial baskets of the Luiseños have already been described. The great granary baskets of the Diegueños are alluded to in the myths. The bestowing of baskets upon the visiting guests who assisted in performing the various ceremonials has already been mentioned. Beautiful baskets were burned with the other possessions of the dead.

It is this burning of household belongings which makes the collecting of ancient specimens of the sort an almost impossible task. Only a few ceremonial objects remain. The things worn and used in daily life have been destroyed.

Weaving was practiced in a rude way in early and later times. All of these Indians had rabbit-skin blankets, worn in cold weather as a cloak. They were made by twisting the strips of the skin into a rope and weaving this as the warp, with strings of milkweed or yucca twine for the woof.

That more elaborate woven goods were manufactured like those alluded to by Venegas, girdles, fillets, and so on, is by no means impossible, since the burning of household effects would account for the non-existence of such at present.

One fine example of Diegueño weaving is the woven sack now in the National Museum, described and figured in Professor Mason's book on Aboriginal American Basketry (Pl. 203, p. 487). It is made of two varieties of milkweed fibre twine woven in alternate bands of the white and red. It is twenty-nine inches high and was made for the storage of seeds. It was discovered hidden in the brush walls of an Indian hut owned by two aged

brothers. Its manufacture long antedated their memory of the past.

Women's skirts of peeled elder or willow bark were made in the simplest way, but a certain amount of weaving was necessary at the top to hold the dependent fringes in place about the waist. Little girls wore petticoats of reddish milkweed twine netted at the top and hanging in fringes.

Netting was universally practiced, the reddish twine being in favor in the mountains near Warner's ranch, where the red-bark milkweed grows; and the yucca fibres being used farther south and towards the desert.

Carrying nets, bags of various sorts, prickly pear cleaners (loose long pouches closed at each end, in which the fruit was gathered and shaken to rid it of its prickles), and so on, were manufactured in this way.

Two sorts of netting stitches are seen, to correspond with the two different regions mentioned above.

At Mesa Grande and Warner's ranch the common netting stitch called the "bowline on a bight" was and is used. In the southern mountains, the Manzanita region, the double loop or square knot is used.[306]

The Luiseño netting stitch has not been investigated.

Sandals made of yucca fibre very neatly arranged or woven are still worn at Manzanita.

A little brush for sweeping the metate stone is manufactured with great precision, the fibres bound with knotted and twisted twine.

Although coiled basketry is common among Luiseños and Diegueños, the twined weave was known and is still used to a certain extent. The chakwhit,[307] Luiseño ceremonial basket, also used by men on a staff hung over the shoulder, was twined, as

[306] The bowline on a bight is made by bringing the shuttle over before the stick, up through the loop of the last row, behind both lines of the loop and down in front of both lines and through the loose loop of new thread on the stick.

The square knot is made by bringing the shuttle behind the stick, up through the loop of the last row, behind both lines of the loop and down between both lines of the loop, over the first and under the second line, pulling backwards and towards the left.

[307] Cha'kwut, openwork rush basket for gathering acorns, cactus, etc.—S.

are the Diegueño basket hats still worn in the Manzanita region. Sifting baskets are made in an openwork twined mesh. The cheyut,[308] Luiseño ceremonial basket used with the coiled tukmul, was twined in flat plaque shape, but is not now to be found in existence. A sacred basket in jar shape was probably twined.

The immense granary baskets made in circular form with a lid, and placed on high rocks or on a framework of poles to secure their contents from the depredations of rodents, are made in a rough twining or interlacing.

Small rudely twined baskets of the same sort were used about the house.

A rare and obsolete form of basket was made by piercing splints of symmetrical shape laid close together and stringing them on twine.

Stone arrow-heads were made within the memory of old people now living; but the sacred flints set on sticks, paviut, were not made, being born of the Earth-mother.

The common grinding mortars and metate stones were made. Very beautiful metates set on three legs, hewn of solid stone, were manufactured at the Missions;[309] but the sacred symmetrical toloache bowls were born of the Earth-mother as people, and were later transformed into their present shape.

Many rare and interesting objects were collected at the command of the early missionaries by their shaman converts and burned as a renunciation of heathenism. As many have probably perished by degrees during Spanish, Mexican, and American occupation in Southern California.

It is not safe to generalize in a negative way from any lack of existing specimens.

Some of the old shaman's sticks from near the desert show rude inlaid work in abalone fragments glued with mescal or other juice. Decorations of feathers, of powdered mica, of beads or disks of mica, and abalone were used. Hair was woven into bracelets and anklets. The eagle-feather skirt was manufactured with twined and netted milkweed fibre, sometimes colored red with the iron scum of springs burned into paint. At the end of

[308] Cheyit, openwork rush basket for sifting.—S.

[309] Probably under Mexican influence.—Ed.

every lowest loop an eagle feather was inserted, hung by the stiff end of the hollow quill bent upon itself. The ends of the strings were left long to fasten about the waist. Feather headdresses were sometimes made with a buckskin cap to which the bunches of feathers were sewn; more commonly of a headband into which the bunches, owl-feathers tied on sticks, were inserted. Painted boards of various sorts were used in ceremonies, now mostly lost. One bull-roarer still exists.

We are enumerating the merest fragments of a past that was undoubtedly rich in objects of native art and industry.

APPENDIX II.

NOTES ON THE LUISEÑOS.

By A. L. Kroeber.

The subjoined information regarding Luiseño beliefs and customs was given principally by Felix Calac of Rincon, and Pachito, an old man of Pauma, in 1904. Pachito was born at the old village site by the Pauma cemetery, not far from the present rancheria of Pauma, and neither he, his father, nor his grandfather, lived at the San Luis Rey mission.

Besides mourning ceremonies of various kinds—five are mentioned below,—the Luiseño possessed puberty or initiation rites for both boys and girls. Those for girls have been described as follows:[310]

Girls' Puberty Ceremony.

A fire was made in a hole in the ground. In this tule was placed. The girls were laid on this on their backs. Two flat stones were heated and laid on their abdomens. Several girls, generally relatives, were usually put through the ceremony at once. They were called *as,* and the ceremony *weghenish.* The ceremony lasted four or five days. A headdress of a plant called *engwish*[311] was worn by the girls for several months after the ceremony. During this period they could neither eat meat nor fish. The duration of this restriction does not seem to have been altogether fixed. The longer it was observed the better it was thought to be for the girls. In some cases it is said to have lasted a year. The ceremony was performed in order to make good women of the girls. They were talked to by their relatives and advised to be good and to give water and food to people.

The conclusion of the girls' period of restrictions at puberty was marked by paintings made by them on the smooth surfaces of large granite boulders. These paintings, some of which can

[310] Am. Anthr., n. s. VIII, 32, 1906.

[311] Enwish, *Echinocystis macrocarpa.*—S.

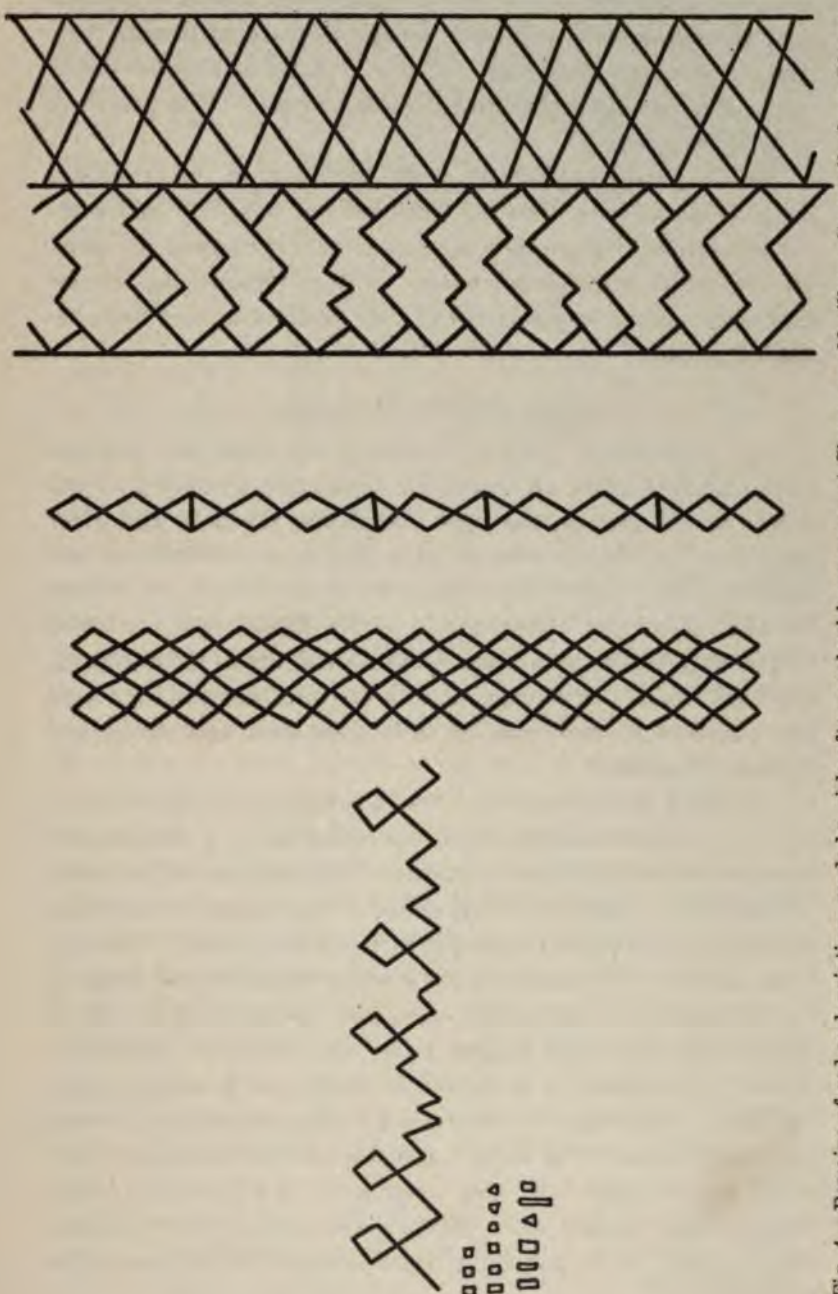


Fig. 4.—Remains of red rock-paintings made by girls after weghenish ceremony at Sheva, an old village site a mile from Rincon.

still be seen, especially near the old village sites, consist of geometrical arrangements of red lines, usually in patterns forming vertical stripes several feet high. (Fig. 4.) After making her painting, a girl was again free to eat meat and salt. The paintings were called *yunish*.[212]

At one period, apparently at the beginning of the ceremony, the girls ate tobacco. Several small balls of this, it is said without admixture of any other substance, were swallowed by them, after which they drank hot water. If they retained the tobacco they were said to be good; but if they vomited it, they were regarded as bad.

Boys' Puberty Ceremony.

The initiation or puberty ceremony for boys, like that for girls, included a test of fortitude. Ants, antum, were put into a hole in the ground, the boys placed into the hole, and after more ants had been thrown on them they were covered over and left for a time. Afterwards they were made to run a race. From the old village site Taghanashpa, where the Pauma graveyard still is, they would run around the hill which lies to the northeast, and back again. In connection with the ceremony the boys were also preached to, and exhorted to be good men, and strong and enduring runners.

The chief initiation of boys, which is said to have followed the ant ordeal, was accompanied by the drinking of a decoction of jimsonweed roots, Spanish toloache. This plant was called mani. The period of stupefaction lasted two or three days, or sometimes four days, but this was regarded as too heavy a dose. The boys to be initiated were caught in the evening and given the drink in the wamgush, the ceremonial enclosure, the same night. Any adult man who might happen to be uninitiated on account of having lived elsewhere in his youth, would also be made to take the drink. The boys were instructed to be good and kind-hearted and not to steal. For several months after the ceremony they could eat no meat. If they refrained for a year they were thought more highly of. After the ceremony the boys were called pumal, plural pumalum, which is equivalent in meaning to

[212] Yuninish, the girls' puberty ceremony.—S. Cf. note 34.

"initiate." The ceremony was called mani paash, toloache-drinking. It was held at irregular intervals, not annually, according as there were boys of age to be initiated. The custom is said not to have come from the divinity Wiyot, but from the tribes of the coast, who in turn derived it from the San Clemente islanders, who were brought to San Luis Rey mission. The mountain Luiseño, after learning the ceremony from the coast people, taught it to other tribes.

The plant was also used as medicine for pain in the body. Its power of bringing on visions was well known.

A part of the initiation ceremonies were connected with a ground-painting in the wamgush. The painting was made with red and yellow paint, paesul and navyot, ashes for white, and charcoal for black, on the ground which formed the background of the painting. The entire picture, which was circular and represented the world, was called torokhoish. (Fig. 5). The circle was bisected from north to south and from east to west. At each end of the two diameters were represented the bear and the rattlesnake. The four radii formed by the intersecting diameters, and pointing as it were to the cardinal directions, were called tamaiawot pomo, the hands of the world. Parallel to the circle on one side, and apparently outside of it, was a representation of mountains, tota-kolauwot, literally, rock-wood or stone-timber. This representation may have consisted of no more than a line. In the two quadrants of the circle farthest away from this mountain symbol, were placed representations respectively of the raven, and of the spider called kuikhingish, or the tarantula. In the center of the circle, where the two diameters intersected, was a hole perhaps a foot and a half across, called the navel. This is said to have had reference to death, to have represented the grave, and indicated to the initiates the fate that would overtake them if they disobeyed. (The ceremonial feathers of an initiate were buried in this hole after his death.) The world is thought to be tied at the north, south, east, and west with hair-ropes, yula-wanaut or yula-wanal. At each of its four ends is a little hill, khawimal, and a rod or cane, nakhat, to which one of the four hair ropes is tied. It is not clear whether this is only a cosmological conception or was also represented in the painting. The entire toro-

khoish painting "filled the wamgush," being apparently about twelve or fifteen feet in diameter.[313]



Fig. 5.—Sand-painting, torokhoish, representing tamaiawot, the earth.

1. Hands (or arms) of the world.
2. Mountain.
3. Spider.
4. Raven.
5. Bear.
6. Rattlesnake.
7. Central hole, navel.

The raven was represented in the torokhoish painting because he is thought to see the whole world and to bring good fortune if one obeys him, but to cause the death of those who do not obey ceremonial instructions or who refuse to enter ceremonies. When a raven was seen coming and cawing, "witiak" was said to him.

After having drunk the jimsonweed, and apparently toward the conclusion of the entire initiation ceremony, the boys rose and stood in a circle around the sand-painting. The initiated men

[313] Compare the native drawing in Journ. Am. Folk-Lore, XIX, 312, 1906.

were with them, and other people looked on from outside. An old man talked to the boys. He explained the meaning of the picture. He told how the raven would see everything, and if anyone disobeyed or thought lightly of the ceremony, the bear and the rattlesnake would kill him. Whether he went north or south or east or west he would be killed. In this way the old man instructed the boys.

A short rope made of wish,[214] and called wanawut or wanal, whereas an ordinary rope is wichit, was laid next to the hole in the center of the painting. The boys went to the wanaut and, holding their feet together, made three jumps along on it. Thereupon they spat into the hole, thereby ending the ceremony.

When one of the initiated, the pumalum, dies, the ground-painting is again made. In the hole in the center are buried his head-dress, cheyat, and similar articles. At the end of the ceremony the initiates squat in a circle, with their hands stretched forward, growl or blow three times, and erase the painting.

When a boy had a bad dream, the initiates brought baskets of seeds and deposited them in the ceremonial enclosure, where they were divided, especially among the old people. Thereupon the initiates danced for three days. If they failed to do this the boy would be bitten by a rattlesnake and would die. Perhaps this refers to a boy dreaming while being initiated.

The ceremonial structure or wamgush, the vanquech of Boscana, is an open enclosure of brush. It is only a few feet high, so that it can be looked over from the outside. The eastern end is left open. At the north and south are small gaps used as entrances. A little distance to the east is a smaller brush enclosure in which the dancers put on their ceremonial dress. When there is dancing in the wamgush as in the tanish or dancing in connection with the toloache ceremony, the pumalum or initiated dancers stand at the western or closed end. A fire is in the middle. The singers, old men, sit at the open or east end, and behind them are women who sing. The people who are looking on are behind these. Half of the dancers proceed from the small enclosure around the southern side of the wamgush and

[214] Objective case of wicha, given by Mr. Sparkman as *Apocynum cannabinum*, while Dr. Barrows, in his Ethno-botany of the Cahuilla Indans, makes Cahuilla wish the name of *Phragmites communis*.

enter at the north, while the other half pass around the northern end and enter from the south.

Mourning Ceremonies.

Three similar mourning ceremonies, differing in degree of elaborateness, were practiced, besides the eagle ceremony and the morahash dance. These three were the tuvish, when the clothes of the dead were washed; the djudjamish, when his clothes were burned; and the totinish or tautinish, at which images of the dead were burned and property was distributed.

At the tuvish, the first and simplest of these ceremonies, the clothes of the dead person were brought to the fire in the ceremonial enclosure and washed or gone over with water, after which they were kept to be burned at the djudjamish. There was singing throughout the tuvish, and at times men or women danced. The men three times emitted a growling or groaning sound ending in a blowing, and accompanied by the exclamation "wiau." This was done to prevent the dead spirit from being about.

The djudjamish was apparently held somewhat later, also in the ceremonial enclosure and at night, and its general course seems to have been similar to that of the tuvish. Its purpose is described as having been to sever all connection with the dead and to cause them to be forgotten. They were told not to remain about, but to go to the sky. If their clothes were not burned, their ghosts would not depart. At this ceremony the relatives of the dead wanted to think of them for the last time.

The tautinish or totinish was prepared for many months before. Women made baskets, which at the ceremony were burned or thrown among the spectators. The same was done with other property and with money. Figures representing the dead were made of tule, dressed in clothing, and burned. Visitors who attended this ceremony were given money or property by the people of the place. They were paid also for dancing. The tautinish ceremony seems to have been held at irregular intervals. Whenever the chief thought that enough people had died to warrant the ceremony being held, it was made. A recent ceremony at Pala was made for twelve persons.

A tuvish ceremony that was seen, began in the early part of the night. There was a fire in the ceremonial enclosure. About midnight some of the people were sitting about inside, but the majority were outside in groups, talking and not paying attention to what was being done. A man holding a turtle-shell rattle was leading the singing. Near him sat several old men, while behind him, on the ground, were several women. At intervals between songs, one of the old men would speak, for about a minute at a time, in a ceremonial or oratorical style, in short detached words. This speaking resembled the declamation which is a characteristic part of Mohave ceremonies, but was less loud and the words were not so abruptly uttered. Also as among the Mohave on such occasions, the content of these speeches was said to have been much the same as the meaning of the words of the songs. Both the rattling and the singing were less monotonous than under similar circumstances among the Mohave; the rattling especially was somewhat varied. All the songs had words. Once an old woman stood up and danced. She held her feet together and her knees were somewhat bent, so that her American dress reached the ground. In consequence it was impossible to determine whether she jumped from the ground a little at each step of the dance, or whether she only raised herself on her toes. She held her hands together in front of her. Most of the time she stretched them out from the wrists, stiffening her arms. Her eyes were shut. While she danced some of the old men stamped one foot on the ground, uttering each time a growl or grunt. Usually several women dance together on this occasion, it was said. After a few songs the old woman sat down again. The principal singer was about southeast of the fire. Several other men sat on the opposite side of the fire. Some of these occasionally accompanied the singing or helped it by exclamations. The woman who danced stood east of the fire, not far from the singers. Those in the enclosure smoked freely, and children and dogs ran about it. The ceremony is said to have continued until about two in the morning.

The songs sung on occasions such as this, in part name animals, and at least at times contain references to myths. It was not learned whether or not they form a connected narrative

series. The owl is sung of because the owl's call is a sign that some one will die. The words of the song mention the bird's call and express regret. Other songs mention the coyote, a coyote's cry near a house being an omen of death to one of the inmates. The words of one song are said to be: "I am sorry, for we must all die." Many songs are about Wiyot, especially his death. Such matters as his foretelling of the time when he would die, and his counting or naming the months until his death, are typical of the subjects of the songs.

In recent years the Indians of Pichanga had given up the mourning ceremonies. A woman of high rank, of a chief's family, had died. Then a person dreamed of Coyote. Coyote said to him: "Why do you not hold the djudjamish any longer? It is not good not to have it. I do not like it so." Then this person told the chief of his dream. He said to him: "Have you heard the coyote howling at night? That was the dead woman. She told me that she wanted us to burn the clothes of the dead again." This dream caused the resumption of the ceremony.

The eagle ceremony is a mourning ceremony for a chief. It is called ashwut maknash, eagle killing. Either an eagle or a condor is used. The people of the coast also use bald eagles and chicken hawks. The birds are taken when young from their nests in the canyons. The eagles of certain places belong to certain villages. Thus the Potrero people owned the eagles at Pachorivo. When caught, an eagle is raised by the chief. At the eagle-ceremony dancing is made during the night around a fire. Men take turns holding the eagle. As each man holds it he presses it, breaking an additional bone. At the cry, "Hu! Hu!" the dancer who is carrying the eagle gives it to another, who then dances with it until the cry is heard again. Toward morning the eagle is finally killed by a certain pressure on the heart. The relatives of the dead chief for whom the ceremony is made then cry. A blanket is laid down and the eagle put on this. The chief's relatives thereupon bring property and money, and lay them with the eagle, which is finally covered with a large basket. People whose relatives have died place the clothing and property of these on the blanket with the eagle. In return the dead chief's successor, who is holding the ceremony, seems to give these peo-

ple an equivalent in property. The entire property placed with the eagle's body is given by the chief making the ceremony to the chief of another village, who divides it among his own people. This chief also takes the eagle, which he burns. The entire ceremony seems to be made by a son or grandson or relative, in other words the successor, of the chief in whose honor it is held, and whom the eagle represents or "calls."

A dance called morahash was performed by a single dancer in the wamgush. It would be made for a dead chief by his son, some years after his death. The young chief would hire the man who danced for him. All chiefs had such dancers; they did not dance themselves. The women sang, the men "growled" or blew, and the singer shook a turtle-shell rattle. The songs were descriptive of the dancing. The dancer was called totawish; his performance is evidently what is called the "tatahuila" dance by the present-day Diegueño, who do not acknowledge this word as their own. The dancer wore a skirt of eagle feathers, called balat; cheyat, a head-dress of a bunch of owl, crow, or raven feathers, fastened to the hair by a pin or stick; piwish, ropes of owl feathers, wound around the head or hung around the neck; and apuma, a head-dress of long eagle-feathers worn upright on the head.

This morahash dance is said to have been among the Luiseño before the toloache-ceremony. It is thought to go back to the time when the people were still in the north. It is not from Wiyot, for Wiyot did not give dances, but the people made them after his death. The morahash was first made over his ashes.

Customs and Beliefs.

The medicine man is called pula. He derives his power from dreaming. He does not dream of Wiyot, nor derive his power from him, but dreams of a rock, a mountain, a person, or something similar. Shamans were men, not women.

The shamans have songs, which they receive from the object of their dream, and which they sing to themselves. It is not known whether they also sing them while doctoring. Their stone pipes seem to be regarded as fetishes. At least shamans frequently speak to their pipes. They also blow tobacco smoke on

the sick person. Sometimes they sleep near the patient, waiting for a dream in which their guardian spirit tells them how to proceed. The main reliance seems to be on sucking. Water is also spurted or blown on the patient.

When a man killed a deer, or rabbits, he brought them to the wamgush. Then the people ate the meat, but he did not partake of it. If he should eat of the meat of animals he himself had killed, even only very little, he would not be able to kill others. However if he confessed to the people that he had taken some of the meat, he would again be able to hunt successfully.

The dead went to the sky.

A menstruating woman did not mix with other people. She could not cook for them. She herself ate neither meat nor fish. She slept by herself, outside the house.

After the birth of a child both the mother and the father remained quiet. They did not cook or work. They remained lying down for twenty, thirty, or forty days. They used medicine of a plant called hulvul,[315] boiled in water. They ate no meat. All this was done for the health of the child. When the child's navel string was cut, it was tied over the navel. After the cord fell off, it was buried.

Women were tattooed on the chin, with a vertical line down the forehead, and with a small circle on each cheek. On their wrists there were bands of tattooing and across the breast a curved band or line from which lines extended downward. Men tattooed less than women.

The following animals are said not to have been eaten: the dog, bear, coyote, lizard, frog, turtle, eagle, buzzard, and raven.

At marriage property was given to the parents of the bride. It is not certain whether this took the form of a purchase payment or merely of a customary gift. The informants questioned knew of no restrictions on communication between parents-in-law and children-in-law.

Houses and Implements.

The house consisted of a framework of posts, rafters, and poles, with a thatching of shuikawat[316] plants. The thatching was

[315] Hulval, *Artemisia californica.*—S.
[316] *Croton californicum.*—S.

then thickly covered with soil. The interior of the house was excavated perhaps two feet. Tule houses were built by the mountain Luiseño while at San Luis Rey mission.

The sweat-house was similar but smaller. Two forked posts were erected and connected by a log, on which poles were rested from both sides. A thatching of plants was covered with mud, and over this was put dry soil. The door was on one of the long sides. The sweat-house was not used for dancing, all such functions occurring in the wamgush enclosure. The sweat-house was regularly used for sweating in the evening, and sometimes in the morning also. After sweating in the evening, men slept in the house, not in the sweat-house. The heat in the sweat-house was produced directly by a fire, not by steam.

The mortars of the Luiseño are generally large boulders weighing perhaps two hundred pounds or more. The cavity is conical and pointed rather than rounded. The pestles are usually a foot or more long and rather unshaped. One or two sides are generally flat, as in Yokuts pestles, and the butt end, which is wider than it is thick, has a diameter of about half the length of the pestle. On the whole the pestles seem to be boulders or slabs which are little worked except at the rather pointed pounding end. The most common material is granite. A flat metate, malal, was also used.

Head-bands of human hair, called yukish,[317] were made from hair cut off in mourning, and were worn by old men in dancing.

Nothing corresponding to a drum is said to have been used in any ceremonies. Whistles, bakhal, of cane or reed, huikish,[318] and asphalt, shanat, were used at the boys' initiation, at the time when the boys were buried and covered with ants. The pumalum or initiated men danced in a circle on this occasion, blowing these whistles and singing in slow broken syllables. The chief musical instrument in ceremonies was the rattle. This was made of a turtle-shell, paayat, which often contained cherry-seeds. String was wound around the shell until the head and leg openings were covered. A stick was put through the top and bottom of the shell until it projected a few inches above and about a foot below.

[317] Yula, hair; yukut, hairy; yutush, the scalp, when detached.—S.

[318] *Elymus condensatus.*—S.

Such rattles were used in the singing in the mourning ceremonies. They were also used for the dancing in connection with the girls' puberty ceremony. At this ceremony women danced, while men, bending their bodies forward, sang and rattled, stamping one foot.

Money, auvirat or khenkhat, was made from shells called si'wal, probably a clam; khapahut, almeja; and shauviah, a large univalve of which the columella was used. The clam shells were made into small disks which were perforated and strung. The strings were measured around the circumference of the hand, much as by the Yokuts, except that the measurement seems to have been a little scantier. The end of the string was held between the tips of two fingers. The string was then passed entirely around the edge of the hand back to its beginning, and continued a second time down one side of the hand to the wrist. This measure, approximately one and a half times the circuit of the hand and fingers, was half the unit measure, which was called ponko. This full measure was also determined by taking the end of the string between two finger tips, and then passing around the elbow and back to the finger tips.

PLATES.

Plate 16 (referred to on page 80 as Pl. 1). Fig. 1.—Medicine-man smoking stone pipe preparatory to swallowing wooden "sword." Fig. 2.—Medicine-man swallowing wooden "sword" about an inch wide and fourteen inches long.

Plate 17 (referred to on page 88 as Pl. 2). Fig. 1.—A Diegueño woman sitting by a storage olla. Fig. 2.—Model of sand-painting for girls' ceremony.

Plate 18 (referred to on page 98 as Pl. 3). Feather headband and skirt of string and feathers.

Plate 19 (referred to on pages 158, 159, as Pl. 4). Fig. 1.—The ancestral home of Lucario Cuevish. Fig. 2.—A painted rock, once a woman, on which two sacred stones are poised.

ERRATUM.

Page 79, lines 26 and 27, for "piavala" and "piyevala" read pievala.



FIG. 1.—MEDICINE-MAN SMOKING STONE PIPE PREPARATORY TO SWALLOWING WOODEN "SWORD."



FIG. 2.—MEDICINE-MAN SWALLOWING WOODEN "SWORD" ABOUT AN INCH WIDE AND FOURTEEN INCHES LONG.

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FIG. 1.—A DIEGUENO WOMAN SITTING BY A STORAGE OLLA.



FIG. 2.—MODEL OF SAND-PAINTING FOR GIRLS' CEREMONY.

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FIG. 1.—THE ANCESTRAL HOME OF LUCARIO CUEVISH.



FIG. 2.—A PAINTED ROCK, ONCE A WOMAN, ON WHICH TWO SACRED STONES ARE POISED.

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THE CULTURE OF THE LUISEÑO INDIANS.

BY

PHILIP STEDMAN SPARKMAN.

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EDITOR'S NOTE.

Philip Stedman Sparkman, the author of this paper, by birth an Englishman, was killed at his home at Rincon, near Valley Center, San Diego county, California, May 19, 1907. For years before his death he had spent much time in communication with the Luiseño Indians of Rincon and vicinity, and in the study of their language, of which he published a sketch in the American Anthropologist of 1905. He left a voluminous manuscript grammar and dictionary of the Luiseño language, which have been secured for permanent preservation by the University of California and are being prepared for publication. Among the papers obtained by the University is the following account of the culture of the Luiseños, which is presented without addition and with only such minor alterations as have been necessary to make it ready for the printer. A Luiseño tale recorded by Mr. Sparkman is published in the Journal of American Folk-Lore of 1908. Several papers issued in this series of University of California Publications, especially "The Religion of the Luiseño Indians of Southern California," "Shoshonean Dialects of California," "A Mission Record of California Indians," and "The Ethnography of the Cahuilla Indians," treat in part or wholly of the same Indians as the present account or of closely related tribes. It will be found that these papers and Mr. Sparkman's corroborate one another closely. Even the slight discrepancies, resting on information independently obtained and representing significant differences of point of view, may have value for future students.

INTRODUCTION.

The Luiseños belong to the large Shoshonean linguistic family, which includes the Bannocks of Idaho and Oregon, the Utes, Paiutes, Comanches, Mokis, and other tribes. Indians of Shoshonean family occupied the coast of California from the mouth of Agua Hedionda creek to about Point Duma. They also occupied the islands of San Nicolas, Santa Catalina, and perhaps San

Clemente also. The first European to visit their territory was Juan Rodriguez Cabrillo, a Portuguese in the Spanish service, who in 1542 saw Santa Catalina island and visited what is now known as San Pedro bay.

That branch of the family known as Luiseños occupied the coast from above San Juan Capistrano to the mouth of Agua Hedionda, and are thus the most southwesterly tribe of the Shoshonean linguistic family in the United States. We cannot pretend to give the exact boundary of their former habitat, but will do so as nearly as possible. Beginning at the mouth of Agua Hedionda, it ran so as to include what was afterwards the San Marcos rancho, also most of the Escondido rancho, one of their villages being situated in the ravine near the gold mine. From here the boundary ran so as to include the Mendenhall and Maxcy ranches, also most of Guejito; from here to the San José valley, part of which it included; from here to near Cahuilla valley; from here so as to include Saboba and Temescal; and from there to the sea near San Juan Capistrano. The language spoken at San Juan Capistrano, as well as that of Saboba, differs considerably from that of the remainder of the Luiseños, and by some the people of those places are not included among the Luiseños.

"Rio San Luis Rey de Francia," River St. Louis King of France, was the name given by the Franciscan friars to what is now known as the San Luis Rey river. Four miles up the river from its mouth was established the mission of San Luis Rey de Francia in 1798. Twenty miles higher up the river the mission of Pala, an outpost of San Luis Rey de Francia, was established in 1816. The Indians who were gathered at these two missions were called "San Luiseños" by the Franciscans. "San Luiseños," the equivalent of "St. Louisans" in English, has now been shortened generally to "Luiseños," and adopted by the tribe as their designation, they, like many Indians, having no name for themselves, except one merely meaning "people."

The neighbors of the Luiseños on the south are the Diegueños, who belong to the Yuman linguistic family. On the north and east are other Shoshoneans known as Cahuillas. This appellation they were given by the Mexicans; it is not, as has been supposed, their native name.

The Luiseños of whom we more particularly write are those living in the valley of the San Luis Rey between Pala and the San José valley. These formerly occupied not only the river valley but also Palomar mountain, and there is a tradition among them that they formerly went to the coast in winter. It must not be supposed that they wandered at will over this territory; on the contrary, each band had its allotted district, in which it alone had the right to gather food and hunt. Thus each band had its tract in the San Luis Rey valley, and another on Palomar, to which it moved during the acorn-gathering season. The land of each band seems to have been sometimes again subdivided among the different families of which the band was composed; at least that part of the land which was valuable for certain food products was thus subdivided.

Each band seems to have guarded its allotted territory with the greatest jealousy, and more quarrels are said to have arisen over trespassing than from all other causes combined. When questioned as to when or how the land was divided and subdivided, the Indians say they cannot tell, that their fathers told them that it always had been thus. Many of the older ones remember how they were cautioned when young never to trespass on the land of others in pursuit of game or food without permission. Yet occasionally a band would become dissatisfied with its habitat, and forcibly intrude itself into that of another. An instance of this took place so recently as still to be remembered and spoken of.

Luiseño geographical names are very numerous indeed, every small tract with any distinguishing feature being named. Sometimes there will be a name for a large tract of country, and then other names for small portions of such a tract. This is not, however, the rule. Usually each small tract has its name, without any general name for the larger area. But large tracts outside of Luiseño territory are known by a general name. Some geographical names are descriptive, but most of them are not. Many of the names given below are those of old village sites near modern localities and settlements, but now applied to these localities. Many names are derived from plants and animals which are or were abundant near the locality named after them.

Totakamilum	Coronado Islands[1]
Kimki harasa	San Clemente Island[2]
Ponga'	Santa Catalina Island[2]
Palimai	Slough at mouth of Agua Hedionda Creek
Exla tovotva	Colorado desert
Paauw	Palomar mountain
Yamiwa	San Jacinto mountain
Wikyo	Highest peak of Palomar mountain
Takwish poshapila	Rocky peak east of Wikyo
Pewipwi	San Bernardino mountain
Kachikchi	Cuyamaca mountain
I'pax	Highest peak of Volcan mountain
Taakwi	Cahuilla mountain
Pashkwo	Monkey hill, San José valley
Katukto	Moro hill, near Fallbrook
Kolo	Mountain nearly opposite where Escondido ditch comes out of San Luis Rey river
Ponawuk	Hill near Pala flour mill
Ta'i	Peak of Palomar, near Bougher's
Kaxpa	Antonio Serrano's house on Pauma ranch
Akipa	The small flat on Pauma ranch
Hunalapa	Oak flat (Pauma ranch)
Tutukvimai	Rodeo (Pauma ranch)
Yami'	Site of Potrero ranch house
Tomka	Valley above same
Kuka	Old Potrero village
Tumau	Site of Pala flour mill
Malamai	Agua Tibia
Pa'i	Agua Tibia warm spring
Kupa	Agua Caliente
Temeko	Temecula
Pichaang	Pichanga
Keish	San Luis Rey
Alapi	San Pascual
Malakash	Santa Ysabel village

[1] Compare the names of places given in the present series of publications, IV, 142-150, 1907, and VIII, 108 *seq.*, 1908.

[2] The names and identifications of these islands were variously given by different informants of the author. *Cf. ibid.*, VIII, 108, note 80. A San Juan Capistrano Indian in 1907 said: "Santa Catalina es Kinke (qīnqe). San Clemente no tiene nombre, esta pegado a Santa Catalina, es la misma cosa."

Saumai	Site of J. Q. Adams' store at Valley Center
Shakishmai	Site of house on Maxcy ranch
Yangi'wana	Mesa Grande
Uahmai	Las Flores
Woahha	Rincon
Pala	Pala
Paisvi	Iron spring on Palomar
Wavam	Where the Pauma Indians had their encampment during the acorn-gathering season on Palomar
Shoau	Where the Pala Indians had their encampment during the acorn-gathering season on Palomar
Shautushma	Where the Yapicha Indians had their encampment during the acorn-gathering season on Palomar
Sulpa	Where J. Frey lives
Akwo	Spring where S. Gamez lives
Mutamai	Where Luis Majel lives
Yuimai	Where Juan Despierto lives
Ahuya	Old village site above Rincon on road to Potrero
Topamai	Old village site on Santa Margarita Ranch near ranch house
Malava	Old village site on Palomar
Wiya'	Old village site on Palomar
Chakuli	Old village site on Palomar
Ashachakwo	Old village site on Palomar
Pahamuk	Old village site on Palomar
Tokamai	Old village site on Palomar
Pavla	Where Indians of Kuka or Potrero encamped while gathering acorns on Palomar
Mokwonmai	Old village site on Palomar
Pakuka	Spring on east side of Palomar
Atupa	Spring on east side of Palomar
Awa'	Aguanga
Pawi	Warm spring in middle of village at Cahuilla valley
Chawimai	Los Duraznos, Cahuilla valley

VEGETABLE FOOD.

The Luiseños had a great variety of food, though to a casual observer the district they inhabit appears to be, for the most part, of a semi-desert character, especially in the latter half of the year.

The winter and spring rains cause numerous annual plants to grow, and many of these are used as greens, being either boiled or eaten fresh with salt.

The seeds of many plants are also used, besides numerous fruits and berries. Seeds are always parched, this being effected by placing them in a broken piece of pottery, or a vessel made for that purpose, and toasting them over the fire, stirring them to prevent burning. Formerly they were often parched by being placed in a basket with live coals, and shaken until they were sufficiently cooked. After being parched, seeds are pounded into flour in a mortar. When required for use, this flour is mixed with water to form a mush, which is eaten cold.

The staple food of the Luiseños, as of so many California Indians, was acorns. At least six species of oaks are found in Luiseño territory. The acorn considered by far the most palatable is that of the black or Kellogg's oak, *Quercus Californica.* This begins to be found at an elevation of about three thousand feet, and is abundant on Palomar.

Next to the black oak the acorns of the common live oak, red oak, or field oak, *Quercus agrifolia,* are most esteemed. This tree is found from the coast to over three thousand feet above sea level. The acorns of this species contain more oil than those of the black oak, and the meal ground from them is of a yellow color.

Quercus chrysolepsis, usually called the maul or Valparaiso oak, grows on Palomar in the cañons at a somewhat lower elevation than the black oak. Its acorns, which are the largest and hardest of any of the oaks, are also considered to be palatable, though difficult to grind, and are gathered when those of the two species first mentioned fail.

The acorns of the white oak, *Quercus Engelmanni,* the live oak, *Quercus Wislizeni,* and the scrub oak, *Quercus dumosa,* are

not at all esteemed, and are only used when other acorns cannot be obtained.

Until quite recently large quantities of acorns were gathered and stored away in acorn granaries. When required they were taken from the granary, placed one by one on a stone, and struck with another stone with sufficient force to crack the hulls. They were then placed in the sun, which caused the hulls to break open, after which these were removed from the acorn with a bone tool, maavish.

Afterwards the acorns were pounded into flour in a mortar, a stone pestle being used for this purpose. The meal is leached with hot water to take out the bitterness. This is sometimes accomplished by placing it in a rush basket and pouring warm water over it; at other times by placing it in a hole made in sand, and then pouring warm water over it, the water soaking away through the sand. The leached meal is afterwards cooked in an earthen vessel.

The importance attached to acorns as food is shown by the fact that large pines were often cut down merely for the sake of the acorns stored in the bark by the woodpeckers.

The kernel of a wild fruit, a kind of plum or cherry, *Cerasus* or *Prunus ilicifolia,* was formerly used to some extent as food. The fruit was spread in the sun until thoroughly dried, when the shells were cracked and the kernels extracted. These were ground into flour which was leached and cooked in exactly the same manner as acorn meal. This flower is almost as white as that made from wheat. The pulp of the fruit is also eaten, but it is exceedingly thin, though not unpleasant to the taste. This fruit grows but sparingly in the San Luis Rey basin, but large quantities grow in the hills and cañons around Cahuilla valley, where it was formerly an important article of food.

Choke cherries are much liked, notwithstanding their puckery taste. They are considered to improve by being kept for a few days after being gathered.

The berries of the toyon or Christmas berry, *Heteromeles* or *Photinia arbutifolia,* are used as food, being parched and eaten without further preparation.

The berries of several species of gooseberries, currants, and

blackberries were eaten, but these grow but sparingly, and were not an important article of food.

Elderberries grow in great abundance in some parts of the San Luis Rey valley. They are much liked, and were formerly gathered in large quantities and dried, besides being cooked and eaten when fresh.

Wild grapes, which abound in the San Luis Rey valley, are cooked and eaten, but they were never dried and preserved like elderberries.

There are several species of prickly pear cactus, the fruit of some of which is much esteemed, while that of others is not. It is eaten fresh, and was formerly peeled, dried in the sun, and stored away for future use, being eaten without being cooked. The seeds were saved, parched, ground into meal, mixed with water in the usual manner, and used as food. The seeds of the cactus known as "cholla" were also used.

The berries of the aromatic sumac, *Rhus trilobata,* were ground into meal and used as food, as were manzanita berries. The pulp only of the latter, but the entire berry of the sumac, was used. Neither of these kinds of berries were parched before being ground, nor was the meal afterwards cooked, but simply mixed with water and eaten.

The bulbs of several plants of the lily family were used as food. They were mostly eaten fresh, but were sometimes cooked.

The edible ground-mushroom is little esteemed, but the tree mushrooms that grow on cottonwood and willow trees are still a favorite article of food. Care is taken to gather them when tender. They are prepared for food by boiling.

The scape or stalk of *Yucca Whipplei,* which grows quite abundantly in many localities on the hillsides, is roasted and eaten, as also was formerly the head of the plant, which was prepared for food by roasting in an earth oven.

By earth oven is meant a pit dug in the ground, in which stones are placed, and a fire built, which is kept up until the stones are well heated, when the article to be cooked is placed among them and covered over with earth.

The blossoms of both *Yucca Whipplei* and *Yucca Mohavensis* are eaten, being cooked in water.

The pods of *Yucca Mohavensis* are also eaten, being prepared by roasting in the coals.

The fresh tender shoots of the white sage are peeled and eaten raw. The fresh shoots of a large rush were also eaten raw formerly.

Mesquite trees are somewhat plentiful in parts of Luiseño territory, but not in the San Luis Rey valley, so the flour of mesquite beans is not an article of food here, though it is occasionally brought for sale from other localities.

Of the plants used as greens the most esteemed now-a-days is wild mustard, though this is probably an introduced plant, as it has no Luiseño name. It is the earliest food plant of the year.

Watercress and wild celery are both cooked, but not eaten fresh.

Several species of wild clover are eaten both fresh and cooked. Lamb's quarter, Indian lettuce, the leaves of the California poppy, peppergrass, and a great many other plants are boiled for greens.

Wild oats formerly were a favorite article of food. They were stripped with the hands from the stalk while standing, afterwards parched together with the husks, and pounded into meal in the usual manner. A favorite food is said to have been composed of oatmeal and dried elderberries, mixed with a little ground chia, the latter being probably used for seasoning.

The seeds of "chia," the Spanish name of *Salvia columbariae*, seem to be more esteemed than any other. Others much used are those of the white and black sages, the thistle sage, the soap-plant *Chenopodium Californicum*, peppergrass, and several Compositae. Some of the seeds used are so excessively small and difficult to collect that it seems probable they were more used by way of seasoning than for their actual food value.

An edible gum is obtained from the white oak, *Quercus Engelmanni;* this is the deposit of a scale-insect. After being gathered it is carefully washed to remove its bitter taste, and is then ready for chewing. It is used exactly as chewing gum.

Another gum is obtained from the milkweed, *Asclepias eriocarpa*. The sap of this plant, which runs out freely when the stems are cut, is collected and boiled in water until it coagulates.

It is then ready for use as chewing gum, and is much esteemed, but is not as lasting as that of the white oak.

FLESH AND HUNTING.

The largest game animal was the black-tail deer, formerly very abundant and still found. They were formerly hunted with bow and arrow, and were also, it is said, taken in snares.

Those who hunted with bow and arrow sometimes used a stuffed deer head with the antlers attached. This they fastened on their head, and on seeing a deer, would slowly approach it, lowering and raising, or bobbing the deer head from side to side. In this manner they often approached sufficiently near to the deer to kill it. The snare was made by placing a running noose in a deer trail, so that the animal would entangle its feet in it. The noose being fastened to a pole which was bent over and lightly fastened to the ground, the struggles of the deer would loosen it; it would then fly back and leave the animal suspended in the air.

There is a place where deer were once said to have been killed by being driven over a precipice, at the foot of which they would be found dead; but it is also said that after a time it was impossible to drive them over it, as they would double back in spite of every effort to prevent them.

Venison was cooked by broiling on hot coals, also in the earth oven, and sometimes, though less often, by boiling in water. When cooked in the earth oven it was sometimes pounded up finely in a mortar, and stored away for future use. The entrails and blood of deer were both used.

In some parts of the territory occupied by the Luiseños antelopes were formerly abundant, notably between Temecula and San Jacinto, but the last were killed about twenty years or more ago. It is said there never were any in the upper San Luis Rey valley.

It is doubtful if much large game was ever killed by the Luiseños with their crude weapons. The principal animal food probably always consisted of jackrabbits and rabbits, which are still the chief game animals. But an exception must be made of

the people who lived permanently on the coast, whose chief flesh diet was fish and mussels.

Now-a-days jackrabbits and rabbits are either killed with a shotgun or small caliber rifle, or hunted on horseback with sticks two and a half or three feet long.

Formerly these animals were hunted with bows and arrows, or trapped by draw nets and snares placed in their runs. They were also driven into a long net stretched across a suitable place, a number of Indians assembling for the purpose.

They were also killed with a flat, curved stick, wakut, which has erroneously been spoken of as a boomerang. Formerly when an Indian went to the field he carried one of these sticks in addition to his bow and arrows. If he saw a rabbit or other animal that he wished to kill standing, he shot at it with the bow; if it was running, he threw the stick at it.

There are two kinds of rabbits, the cottontail and a smaller, darker one weighing only a little more than a pound when full grown.

Rabbits and jackrabbits were usually cooked by broiling on hot coals. They were also sometimes cooked in the earth oven. Sometimes, after being cooked in the latter manner, their flesh, together with the bones, was pounded up in a mortar, and either eaten at once or stored away for future use.

A wood rat is much liked. This animal builds a nest of small sticks, sometimes quite large, in the brush or undergrowth, in the cactus, and occasionally in trees. In hunting it the nests are often set on fire to drive it out, one, or rarely two, being found in each nest. Usually the nest is overturned, and the rats killed with bows and arrows or sticks. Numbers are sometimes killed after a flood has driven them out of their nests in the undergrowth along the river. Several other kinds of rats were formerly used as food, as well as ground squirrels and different kinds of mice. These animals were often trapped. Two flat stones were taken. On the lower one an acorn was placed on end, the upper stone resting on it, so that when the acorn was gnawed through by an animal the stone would fall and kill it. Since only small animals could get between the stones when baited in the above manner, for larger ones, as wood rats and ground

squirrels, a short stick was placed on top of the acorns. This made room for them to crawl between the stones and reach the bait.

Tree squirrels were not eaten. Neither were wild pigeons nor doves until quite recently, the latter from superstitious motives. The valley quail, found in great numbers in the San Luis Rey valley and adjacent country, even to the summit of Palomar, have always been eaten. They were formerly killed with the bow, and were also hunted at night with fire, dry stems of the cholla cactus being set on fire and used to attract them; when they flew towards the light they were knocked down with sticks. During a prolonged period of cold rainy weather they become chilled so that they cannot fly far; when in that condition they were formerly sometimes run down by boys. Mountain quail were also eaten. Rats, mice, quails, and squirrels were cooked by broiling on coals.

Ducks, formerly plentiful, were killed with the bow or with the throwing stick. Mudhens were not eaten. Larks and robins and the eggs of ducks and quails were eaten.

Bears were formerly quite common on Palomar, and also in Bear valley. They were occasionally killed, but their flesh was never eaten. Their skins and claws were saved, the latter being used to make necklaces. A stone was erected wherever a bear or mountain lion was killed.

Before a hunt a fire was sometimes built of white sage and *Artemisia Californica*. The hunters stood around this and in the smoke, the belief being that this absolved them from any breach of social observances they might have committed, which would otherwise bring them ill luck.

Grasshoppers have always been abundant in the San José valley, this being one of the localities in which they hatch. They were formerly eaten by the Indians who lived there, and sometimes by others. The manner of taking them was by digging a pit, which was surrounded at a distance by Indians with boughs, who drove them from all sides into the pit. This was of course before they had reached the flying stage of their existence. A fire was built upon them and they were killed and roasted at the same time. They are said to have been eaten without any further

preparation.

A large green grub was eaten. It was boiled in water and eaten with salt.

FISHING.

Mountain trout are found in a few localities in the upper San Luis Rey river, also in some of the mountain streams which empty into it. The only other fish is a very small one. The trout were taken when the water was low by macerating a plant and throwing it in the pools, when they became stupefied and rose to the surface, where they were taken by hand, or scooped out with a rush basket. The small fish were taken with a dip net.

While fish formed an unimportant article of food for those who lived inland, it was the chief dependence of those who lived on the coast. They used a canoe or raft of rushes, with which they went out some distance from the shore to fish with a dip net. Seine nets were also used. Some wooden canoes were also made from the trunks of trees. It is stated that voyages were formerly made with these as far as San Clemente island. The coast people also fished with hook and line. The line was made from the fiber of *Yucca Mohavensis* and the hook from an abalone shell, the part near the center being used, where the grain is more twisted, and so more suitable for the purpose. Fish hooks were also made of bone. The coast people also consumed large quantities of shell fish of several species. Some say that they used a harpoon for spearing fish, the bone point being loosely inserted in a socket at the end of a pole, to which it was attached by a line, so that on striking a fish the point was pulled from the socket, but was still attached to the pole by the line. Others say that no harpoon was ever used by them. This may be true, but it is certain that the Diegueños used one, and it seems improbable that the Luiseños would not have employed it.

CLOTHING.

The chief article of clothing was a cape-like garment of fur covering the upper part of the body and reaching almost to the knees, but this was probably only worn in the coldest weather. During most of the year the men are said to have worn no clothing at all. The capes were sometimes made of rabbit skins, cut

into strips and woven with a woof of twine. Others were made of deer-skins, and some of sea-otter skins. These latter were the most highly prized, but were not common, except perhaps on the coast.

Another article of dress was an apron, pishkwut, generally of net-work, made from the twine obtained from dogbane, *Apocynum cannabinum*, or the milkweed, *Asclepias eriocarpa*. Another apron, shehevish, was made of the inner bark of willow or cottonwood. This was worn behind, while the apron of network was worn in front. Both these aprons were worn exclusively by women, who never went entirely unclothed.

A basket hat of coiled ware was worn by women, especially when they had a burden to carry, when it was used to protect the forehead, the cord of the carrying net resting on it. Men might also use this basket hat when they had a burden to carry. Another covering for the head was woven from rushes; this was used in the same manner as the coiled basket hat.

POTTERY.

Some doubt has been expressed as to whether the Indians of Southern California understood the art of making pottery before the arrival of the friars. It does not seem that there is any doubt that at least some of them did. Costanso's report of the expedition of 1769 speaks, though somewhat vaguely, of the Indians of San Diego as using pottery. The Luiseños themselves say positively that they were pottery makers.

Several different kinds of earthen vessels are made, the commonest form being one used now for keeping water cool, and formerly also used for storing seeds. This is called narungrush. A form of vessel with an extra wide mouth, wiwlish, is used for cooking food, another with a small mouth, nadungdamal, for carrying water. As water is carried on the back or shoulder, it would spill out of a large-mouthed vessel, while the mouth of a small one is easily stopped up with a bunch of grass or rushes. One type of vessel, papakamal, was made with two small mouths. This form was of small size, and was used to carry a small amount of water for drinking when people were out gathering food. It

was carried by a string passed through the two small mouths, the Luiseños never making handles for their pottery or baskets. A bowl-shaped vessel was used for serving food. A shallow dish, tevatvamal, in shape between a plate and a saucer, was also used for serving food.

The only tools used in pottery making are a flat piece of wood and a smooth pebble of suitable size. Pottery is baked by merely digging a pit and filling it with dry cow-dung, among which the vessels are placed. The dry bark of trees was formerly used, wood not making a sufficiently hot fire. The clay used is thoroughly kneaded and tempered, and strips or coils of it are gradually added to the edge of the growing vessel. We have never seen any painted pottery made by the Luiseños, but the Cahuillas who live on the Colorado desert sometimes ornamented theirs.

A pipe, hukapish, was sometimes made of clay. It was short and tubular, tapering rather abruptly toward the small mouth-end.

ARTICLES MADE OF PLANT FIBERS.

The best fiber is made from dogbane or Indian hemp, *Apocynum cannabinum,* a perennial plant with annual stems. The inner bark furnishes the fiber. Sometimes the outer covering is scraped off and the inner bark then removed from the stalk; or the bark is pulled off entire, and soaked in boiling water, after which the outer covering easily separates from the fiber. In either case the fiber is rolled into a ball, and made into twine by rolling it between the palm of the hand and the bare thigh.

A milkweed, *Asclepias eriocarpa,* furnishes a light-colored fiber, but it is not so durable as that obtained from dogbane. The fiber is separated from the pulp by soaking the stems in boiling water; or, late in the season, when the pulp has decayed, it may be separated by merely basting the stems. It is then made into a ball, which is afterwards made into twine in the same manner as dogbane fiber.

The common nettle, *Urtica holosericea,* also furnishes a fiber, but it is little esteemed.

The twine made from the plants mentioned is usually two-ply,

but three-ply and four-ply twine is also made.[2a] Bowstrings are made from such twine, generally of dogbane.

A large-meshed net for carrying bulky or heavy articles, ikut, is also made from twine. This carrying-net has a cord attached that passes across the forehead, which bears part of the weight of the contents. A net-work sack for carrying acorns, kawish, was formerly made, the mesh being sufficiently small to prevent the acorns from falling through. The mouth of this sack might be tied and the sack itself placed in the large-meshed carrying net, or it could be used alone, as it had a cord attached to it in the same manner as the carrying net. One we have seen would probably hold about a bushel. Other net-work sacks with a still finer mesh are said to have been made at one time. In these small seeds were carried.

A long net, yulapish, for use at rabbit drives, was occasionally made. These were considered very valuable, much time being consumed in their manufacture. A draw-net for catching rabbits and jackrabbits was also made. This was placed in their runs, or stretched between bushes where they would be likely to pass. An endeavor was then made to drive them towards the nets. A small fine-meshed dip-net was made for catching a very small fish found in streams. A large dip-net was made for sea fishing.

The front apron worn by women was also formerly made from this cordage, sometimes of net-work and sometimes of loose strings suspended to a cord tied around the waist.

Slings, pivanlish, were also made from twine, and it was used for many other purposes. The fiber of *Yucca Mohavensis,* so much used by the Cahuillas, is seldom employed by the Luiseños, though a fish line was formerly made from it. The leaves are soaked in water until the pulpy part decays, when they are basted to separate the fiber.

From the fibers covering the bulb of the soap-root, *Chlorogalum pomeridianum,* a small brush, alukut, is made. This is used, in pounding acorns, to sweep up the scattered meal, and to brush it from the mortar.

[2a] The twine made by the California Indians was almost invariably two-ply. Perhaps the Luiseño three-ply and four-ply string is due to European influence.

BASKETS AND BASKET-MAKING.

Basket making is an art in which the Luiseños are quite adept. Their usual basketry is a coiled ware, the foundation of the coil being composed of a long grass, *Epicampes rigens Californica*. The splints with which the coil is wrapped are usually from the aromatic sumac, *Rhus trilobata*, but when it is wished to give a brown color the lower part of a rush is used.

Several different forms of these coiled baskets are made, each having a different name, and being used for a different purpose. One conical shaped basket did duty as a hat, chilkwut, and was also used as a drinking vessel, also at times to eat out of. A large basket, peyevla, was used for storage purposes, various kinds of food being kept in it. A nearly flat basket, tukmal, was used for winnowing and cleaning seeds, and for other purposes. To winnow, the article was placed in the basket, lifted in the air, and allowed to fall slowly so that the wind would carry away the rubbish. The most common basket, pa'kwut, is basin-shaped. This form varies in size. Fourteen inches in diameter and four deep would be a medium size. Another kind, called peyevmal, usually has the sides bulging slightly, with the mouth drawn in; these are the smallest of all.

Baskets are always patterned with black, and sometimes also with brown, on the light ground of the sumac, and rarely a basket is made entirely black or brown. No model is ever used, except possibly of late years occasionally; and no two baskets are ever exactly alike. Basket-making is a very slow and tedious process, there being from ten to eighteen wraps of the coil to an inch in an ordinary basket, and in rare cases even more. Quite a small basket, if well made, will require ten thousand stitches or wraps of the coil. Sometimes a pattern is made to represent a bird, animal, or leaf, but most of them represent the momentary fancy of the maker. Much has been written to prove that Indian basket patterns have some hidden symbolic or religious significance, but in the case of the Luiseños they have none whatever. On this point we speak positively.

Besides the coiled baskets, woven or twined ones are made from a rush, *Juncus Mertensianus*. These are of open-work, and

are quite roughly made. One kind is used as a sifter, another to leach acorn-meal in, others of different sizes are used for every-day purposes, such as gathering acorns and cactus. It is known that some of the Indians of Southern California made baskets of rushes, coated with asphaltum to render them waterproof, but the Luiseños say that they never made this class of baskets.

BOWS AND ARROWS.

Bows are usually about five feet long, somewhat thicker in the middle, and gradually tapering towards the ends, the intent being to give more spring to the bow and carry the arrow with greater force. They are commonly made of willow, also of elder and ash, which are considered superior to willow. Excellent wood for making bows is said to be furnished by a species of mountain ash, and still better by a shrub that grows in a few places on Palomar mountain.

The arrow generally used has a mainshaft of cane, *Elymus condensatus,* and a foreshaft of a greasewood, *Adenostoma fasciculatum,* which is generally hardened in the fire. The mainshaft will perhaps average about two feet three inches in length, and the foreshaft about nine inches. The latter is inserted in the hollow end of the cane used for the mainshaft, glued in place with pitch or asphaltum, and bound firmly with sinew.

Three trimmed feathers are attached to the shaft by wrapping with sinew, a little asphaltum being used to keep the sinew threads from slipping out of place. The feathers are not tied straight on the shaft, but twisted slightly to one side, the object being to give a rotary motion to the arrow, and so, it is thought, hold it straighter to its course, on the same principle as the spiral grooving of a rifle barrel. The feathers used are mostly from different species of hawks.

Some arrows were formerly tipped with stone points, teket, the base of the point being inserted in a notch in the end of the foreshaft, to which it was securely tied with sinew, gum or asphaltum being also used to assist in keeping it in place. The gum most esteemed for this purpose was that obtained from the greasewood, *Adenostoma fasciculatum,* the same shrub from which the foreshafts are made.

Small arrows are also made from the stems of two tall weeds, *Artemisia heterophylla* and *Heterotheca grandifolia.* These arrows have a foreshaft, and are feathered like those of cane.

All the above arrows are straightened by means of a grooved stone, yaulash. This is heated in the fire, and the arrow passed back and forth along the groove until it is thoroughly heated, when it is straightened and allowed to cool, after which it will retain its shape.

Arrows are also made from the arrow-weed, *Pluchea borealis.*[3]

The stone points or arrowheads always have a concave base. Farther north tanged arrowheads were sometimes used, but the Luiseños did not employ them.

Arrowpoints are chipped or flaked into shape with a tool, pilaxpish, made from a piece of deer antler. Some arrowpoints are quite large, the two ends of the concave base projecting considerably on either side of the foreshaft, while others are very small indeed.

An ordinary Luiseño bow will carry an arrow about one hundred yards, but is not effective for more than half that distance. When not in use it is always unstrung to keep the string from weakening. Bowstrings are oftenest made of the fiber of dogbane, *Apocynum cannabinum,* but are also made from that of milkweed or the stinging nettle. Most of the strings are two-ply, but some are three-ply and four-ply. They are also made of sinew thread, and then are always three-ply.[3a]

The quiver is made of the skin of a fox, wildcat, or other animal, and is slung over the shoulder by a cord attached to it. A small quantity of long tree-moss may be placed in the bottom to keep the arrowpoints from being damaged.

In using the bow, arrows of arrow-weed are grasped between the thumb and forefinger, but other kinds are held loosely between the fingers, usually between the first and second; this leaves all the four fingers free to draw the bowstring.

[3] This sentence was left uncompleted by the author. Perhaps he intended to add that this type of arrow lacked foreshaft and stone point.

[3a] Two Cahuilla bows in the Museum of the Department of Anthropology show three-ply sinew string. The sinew strings on two of three Mohave bows are also three-ply.

STONE IMPLEMENTS.

Many stone implements have been found in the habitat of the Luiseños whose use they have lost all knowledge of, if indeed they were not left behind by some other tribe who formerly occupied the territory.

The ordinary pestle is merely a conveniently shaped stone, and the ordinary mortar a hole in a large flat granite rock near the dwelling. But many mortars are made of roundish boulders, mostly granite, though some are of tufa rock from a locality near the coast. So there are two kinds of mortars, the permanent ones of the large rocks, and others made from loose boulders, which, being portable, may be used where there are no large rocks near, or when, on account of bad weather, it is necessary to do the grinding under shelter.

In beginning to make a new mortar, arusut, the hole was not hollowed out at once to the required depth. A slight cavity was chipped in the rock, and a basin-shaped basket placed over it and glued in place with asphaltum or pitch, the sides of the basket keeping the acorns or other seeds from flying out when struck with the pestle. But with constant use the slight cavity made in the rock becomes deeper and deeper until the basket is no longer necessary, when it is removed. Many discarded mortars are found that have been worn clear through by continual pounding. Often on a large flat rock a number of mortar holes will be found, some of them of the usual depth, others only an inch or two deep, evidently just begun, while others may be a foot or more in depth, which having by continued use become too deep, have been abandoned and the new holes commenced.

One kind of mortar, tamyush, was used exclusively by the medicine men for pounding up the roots of jimson weed, *Datura meteloides,* for use at the boys' puberty ceremony. Some of these are quite symmetrical, being polished with considerable care, and some have even an attempt at ornamentation in the shape of grooves cut on the outside. The pestle of these mortars is also neatly shaped and polished. Another and very small mortar, tamya-mal, is said to have been used for mixing paint. This is also polished, and is almost exactly round.

It is a question whether the metates or grinding stones, ngohilish, now in use were employed prior to the arrival of the Mexicans. Some of the Luiseños think they were, while others say they were not, that their ancestors used only mortars. The rub-stone of the metate is called ngohilish po-ma, metate its-hand.

Flat perforated stones have been found. It is thought these were formerly used for cooking, the hole enabling them to be easily handled, when hot, by a stick thrust through them. They were probably also used for heating water.

A large stone tool has been found which may perhaps be called a stone adze. It weighs nearly eleven pounds, and was evidently intended to be used by being grasped with both hands.

Small sharp-edged flakes of a hard black stone were used as knives. Larger stones with a cutting edge were probably used for skinning or fleshing hides, but some are heavier than would be required for these purposes.

FEATHER OBJECTS.

The most valuable article made from feathers is a sort of apron or waist dress, pa'lut. This extends about half way around the body, the upper portion being net-work. To the lower part of the network the feathers are attached by cutting part of the twine of the network, and tucking it into the hollow of the quill. The wing or tail feathers of only three birds can be used to make this skirt, namely, the golden eagle, the bald or white-headed eagle, and the California vulture or condor. It is worn at the morahash dance.

Another feather object, a long and flat band, is made of a double row of feathers strung on two strings, the quills, which are turned inwards, being perforated, and the strings passed through the perforations. This object is worn slung over one shoulder, so as to hang diagonally across the chest.

A bunch of feathers tied on the end of a stick, cheyat, is fastened on the head and worn at certain dances. The feathers of owls, hawks, and crows are used.

Feathers fastened to a cord so as to form a head-band are worn at several dances and ceremonies.

FIRE MAKING.

The wood most used for fire making is that of *Baccharis Douglasii*. A flat stick of this, as dry as possible, is obtained and a shallow hole made in it, from which a small notch is cut to the edge of the stick. The drill, a short piece of wood with the lower end trimmed to fit the hole, is then placed in it and twirled rapidly between the palms with a downward pressure. This causes a fine dust to be ground from the stick. This dust runs out to one side through the notch, and if conditions are favorable, after a time ignites, no tinder being used. But if the wood is not thoroughly dry, or if the air is moist, it is exceedingly difficult to kindle a fire by this method.

GUMS, DYES, AND PAINT.

The most useful pitch is the asphaltum found where it has been thrown up on the coast by the waves, also in some localities inland. This is used for various purposes, such as mending broken pottery, gluing foreshafts of arrows to the mainshaft, and so on. A gum is obtained from a shrub growing in great abundance in certain parts. This is caused by a scale insect. It was formerly used to glue arrowheads to the foreshaft. The gum of pines was also used.

To obtain the black color seen in baskets the splints of sumac are boiled in water in which oxide of iron from water impregnated with iron, and some of the black dirt or muck from marshy places, have been placed. A yellow dye is obtained from the roots of *Psoralea macrostachya*, a tall leguminous plant growing along streams, by boiling them in water with the substance to be dyed. The juice of blackberries is sometimes used to stain articles of Luiseño manufacture. This is of course not permanent.

An excellent red paint was made. Many rock paintings made with it are still to be seen, although it has not been used for many years. Three different ingredients were used in its manufacture, one being the oxide of iron already spoken of as being used to make a black dye. Another was turpentine obtained from pine

trees, and the third the ground kernels of the seeds of chilicothe, *Echinocystis macrocarpa*. These were probably valued for the oil they contain. We cannot learn that any animal fats were used in this red paint. This is the paint with which paintings were made on rocks during the period of restriction of the girls' puberty ceremony.

MISCELLANEOUS ARTS.

The root of *Chenopodium Californicum* was grated and used as soap, also the bulb of soap-root, *Chlorogalum pomeridianum*. The fruit of the wild gourd, *Cucurbita foetidissima*, is broken open when ripe, and the inside rubbed on articles to be cleaned.

A white clay is used to wash the head with; it is thought to be beneficial for dandruff.

The pilaxpish or deer-antler tool for flaking stone arrow-heads has been mentioned.

A chisel was also made from deer antler. The base of the antler formed the butt of the chisel, which a stone hammer was used to drive. An antler as straight as possible was selected.

Tobacco pipes, hukapish, were usually made of clay, and had no stem, a person, it is said, lying down to smoke. One kind of pipe had a stem, but this seems to have been used only at religious festivals.

A rattle, paayat, is made of one or more land-turtle shells, with choke-cherry stones or certain seeds inside.

A rattle was also made of a number of deer hoofs tied on the end of loose strings. This was formerly used by hunters at a ceremony performed by them before going to hunt deer, with the idea of insuring their success.

Necklaces of deer hoofs, also of bear claws, were sometimes worn at certain dances.

A mat of reeds or rushes was made by perforating and passing twine through them. One was three feet by two feet nine inches, and had four rows of twine. In this mat were rolled up the articles used at religious ceremonies by the chief of festivals, not only his own, but also of the other members of his clan.

Until quite recently a large receptacle was made for the

storage of acorns. Where boulders of sufficient size were near the dwelling, the receptacles were placed on top. Otherwise they were put on platforms of poles. They were made in a very rough manner of coils of willow, *Adenostoma fasciculatum*, or other plants. These receptacles have generally been called acorn granaries. The mouth is covered with a flat stone. They are said to have held eight to twelve bushels.

A bullroarer, momlaxpish, consists of a flat stick with a double string passed through a hole at one end. When the string is twisted tightly and the stick swung around the head it makes a loud humming noise, and is used to call the people together at feasts.

Several ornamented sticks were used at religious ceremonies. One of these, paviut, had a pointed crystal inserted in one end, and sometimes bits of shell glued to the sides with pitch a little below the crystal.

There seems to have been no musical instrument except a rude flute, widolish. This was made from a piece of elder wood with the pith removed. Specimens seen were about twenty inches long, and had four holes.

A popgun of elder wood was made as a plaything for boys.

A syringe was made of the bladder of a deer and a piece of cane, the bladder being inflated and then pressed with the hands to eject the contents.

Several herbs are used to make tea, which is used partly as medicine, and also as a beverage by people who are not ill. The tea is made by steeping the plants in boiling water. The plants are sometimes used fresh, but are oftener dried. The bird-claw fern, *Pellaea ornithopus*, is one of the plants used for this purpose. Another is *Micromeria Douglasii*, a creeping aromatic plant of the mint family growing in the shade of trees. Another plant of the mint family, *Monardella lanceolata*, is also used.

A tea was made from several different plants that were bitter and acted as emetics when the throat was tickled with a feather. Emetics were formerly much used.

The Luiseños made no intoxicating drink of any kind whatever, the stupefying jimson-weed, *Datura meteloides*, being used for religious purposes, not inebriation.

GAMES.

The chief gambling game of the Luiseños, tepanish, Spanish pion, is played with four small pieces of bone and four of wood dyed black. Fifteen sticks of wood about a foot long and of the thickness of a lead pencil are used as counters. Each pair of the pieces of bone and wood is tied to the ends of a doubled string about a foot long. These pieces of wood and bone represent whites and blacks. There are four players on each side. The four who play on one side each take a white and a black piece and sling them to their wrists by the strings, concealing their movements under a blanket or other covering. One of the opposing players then guesses in which hand the white pieces are held. Should he guess all four correctly, his opponents do not take any of the counters; should he guess three correctly, they take one; should he guess two correctly, they take two; should he only guess one correctly, they take three; while should he miss all four, they take four counters. The players whose white pieces are not guessed continue to hide them, their side receiving one counter for each mistaken guess, until the last piece on the first side is correctly guessed. The four players of the opposite side then take the sticks and bones, and one of their opponents guesses in which hand the white pieces are. This is kept up until one side has all the fifteen counters, thus winning the game.

A ring-and-pin game, chehut, is played with a string of the large acorn-cups of the Valparaiso oak. These are hollowed out and strung on a string which is tied to the larger end of a pointed stick. As many as possible of the string of cups are caught on the pointed end of the stick.

HOUSES.

The primitive house was of a conical form. A circular pit was dug in the earth, perhaps two feet deep. Some crotched poles were then set in the ground with the tops placed together, no king-pole being used. Other smaller poles were then leaned against these and the whole covered with brush so as to shed the rain. An opening was left at one side as an entrance. There

was also an opening left at the top for the smoke to escape. When the weather was fine, cooking was performed out of doors; at other times a fire was built in the center of the house. During cool nights a fire was also built in the center, and around this the inmates slept, with their feet towards it. A house built partly underground in this manner requires but little fire to warm it. Sometimes the entrance was through a covered way extending some distance, through which one crawled on hands and knees to enter. In the mountains the poles of the house were covered with cedar bark instead of brush, and on the coast large rushes or sedges were used to cover the pole framework. Often the house was built without any pit, especially if it was only intended for temporary or casual use.

Costanso, in his report of the expedition of 1769, speaks of the Indians of San Diego as living in "shelters of boughs and huts of a pyramidal shape covered with earth," and of those of the Santa Barbara channel as having houses "of a spherical form in the fashion of a half orange, covered with rushes, with the hearth in the middle, and in the top of the house a vent or chimney to give exit for the smoke." As the former of these people lived south and the latter north of the Luiseño and other Shoshonean tribes, much the same style of dwelling seems to have prevailed all along the coast slope of Southern California.

MARRIAGE.

Until recently a girl could not be taken for wife without the consent of her parents or guardian. The suitor had to make a bargain with them, and pay a price agreed upon, which seems to have been proportioned to some extent to his wealth, as a well-to-do man would be expected to give more than a poor one. Still marriage was not entirely a mercenary affair, as a man who was idle or worthless, or a poor hunter, had, it is said, much difficulty to obtain a wife, while one who was industrious, or a skillful hunter, could easily do so. This shows that the parents or guardians of a girl took an interest in her future welfare, and it seems probable that her own inclination was consulted to some extent.

All accounts agree, however, that after her parents or guardians had once disposed of her they had no more control over her.

Should she become a widow, or separate from her husband, she was free to marry whom she liked.

It is said that polygamy was not common, though some men would have two wives, and occasionally more. The most usual form was for a man to marry several sisters one after the other. It is said to have been permissible for a free woman, such as a widow, to herself propose to a man that he take her as a wife, even though he was already married, and it was thought unchivalrous for him to refuse to do so. If a man had two or more wives it was customary for him to give one of them to a brother who might have lost his only wife. Until quite recently it was thought to be in a measure obligatory for an unmarried woman to marry the husband of her deceased sister. For her to decline to do so was thought to show disrespect to the deceased sister.

Some say that another method of marriage was for a man and several of his friends to carry off by force the woman he wished to marry, even from the house of her parents.

Marriages with even distant relations were looked upon with extreme disfavor.

When a child is adopted by an Indian family it is looked upon as one of their own children, and its marriage with one of its foster relations is regarded as incestuous.

One remarkable belief was that when a woman had a child, certain acts on the part of its father would affect its health in the same manner as if they were performed by the mother herself. So for some time after the birth of a child its father was supposed to be as careful of himself as its mother. He was forbidden to smoke, as that would choke the infant. He was also careful not to take cold, as that would affect the infant's health. Neither, if it was winter, was it allowable for him to drink cold water. It was in fact thought improper for him to eat or drink anything that is usually prohibited to a woman with a newly born child. When an infant died within a few days of its birth, its mother often attributed its death to the violation by its father of some of the prescribed rules, and quarrels often arose between a husband and wife on this account.

It was customary for a woman for a certain time after bearing a child to keep herself with a fire in a close house.

GOVERNMENT.

There was no government worthy the name among the Luiseños, in which respect they seem not to have differed from most Indians of California.

Each clan[4] appears to have inhabited a separate village, and to have been a law unto itself.

One sometimes hears of the power exercised by chiefs in other parts of America, but the Luiseños seem to have been more democratic. There appear to be no legends of powerful chiefs.

The religious chief of each clan seems to have possessed the most power, all matters pertaining to religion being under his control. This office was hereditary, though in some cases it might pass out of the direct line of descent, as when the heir was incapable of performing the duties. Women in some cases held the office.

The office of chief of the rabbit hunt was hereditary.

Presumably the medicine man possessed a certain amount of governmental power.

It is certain that the Indians fought at times, and it would seem that on such occasions they must of necessity have had a leader.

SHAMANISM.

As may be supposed, witchcraft is still much believed in, though not nearly so much as formerly. A person whose children are dying, even of such a disease as consumption, will imagine that some evilly disposed wizard is bewitching them. He will perhaps go to some wizard and ask him who is killing his children. The wizard will inform him that a certain person is doing so; and after this, nothing will make the man believe otherwise.

To bewitch a person it is considered necessary to get something belonging to his body, as a little of his hair, the parings

[4] The term clan here and in the following pages appears to be the equivalent of the word band in the introduction. No mention is made by the author or by any other of clan-totemism. It would seem that the Luiseño clan or band was similar to the semi-totemic clans of the Mohave but without the totemism; or to the village of the greater part of California, with perhaps greater emphasis on real or imagined kinship and descent.

of his nails, some of his blood, or a handkerchief that he has blown his nose in. For this reason it was formerly customary when one had his hair cut to carefully sweep up every particle, carry it away, and bury it, for fear that some enemy might possess himself of it to bewitch him. Some follow this custom still.

One method employed by the wizards is said to be to make small images of the people they wish to kill, and to perform their incantations over them. It is said that such images have sometimes been found, either accidentally, or in the house of a wizard after his death. Should the finder burn them, the death of the wizard or witch is said to follow invariably.

The wizards, shamans, or medicine-men, by whichever name they may be called, are nearly all doctors. An Indian has but little faith in medicine, but much more in the supernatural powers of the medicine-men. It is a fact that the latter use remedies made from plants to some extent, but they rely mostly on shamanistic practices. One of their methods of treatment is to suck the part of the body affected, and pretend to draw out something. Sometimes it will be a greenish or blackish fluid, or perhaps a reddish liquid that they declare to be blood; at other times beetles, lizards, or stones. A Cahuilla doctor is said to have sucked a rattlesnake about a foot long out of a woman's chest. They also doctor by rubbing or blowing on the part of the body which is paining the patient. Sometimes the rubbing is performed with a stone of peculiar shape or color. They also use a bunch of feathers to shake over the patient, also sometimes a stick with a number of rattlesnake rattles tied on one end. Some of them must either be sleight-of-hand performers, or else possess the power to hypnotize. We have heard one who did not believe in their supernatural powers say that "they make you think you see things you don't see." We have often wondered if they believe in their own arts, and have come to the conclusion that they do to a certain extent, though they must know that their pretended sucking of substances from the bodies of their patients is fraudulent.

A substance is compounded by medicine-men which is supposed to cause persons of the opposite sex to become enamored

of its possessor. It is much used by both men and women who wish to get married, also by those whose husbands or wives have either left them or no longer feel affection for them. The mere possession of it is thought to be sufficient, but if it is wished to captivate a person a little of it may be rubbed on the hands, and an endeavor made to shake hands with him or her. It is also sometimes rubbed on the face. When it fails to accomplish the desired purpose, appeals are often made to the medicine-man to send a "stronger medicine." Many are willing to testify to the efficacy of this substance, but this is easily accounted for by the fact that their faith in it is so great that its possession gives them more courage than they had before. This may cause them to be successful, and they not unnaturally attribute it to the "medicine."

A family who had a relative die came to the conclusion that he had been bewitched by a certain person, a member of the family who was a medicine-man having declared that he had found out who killed their relative. So they talked over the matter of revenging themselves by in turn bewitching and killing their relative's slayer. Now this man was at Los Angeles, over a hundred miles away, and they were at first nonplussed how to get hold of something of his body to work on. After a while one of them remembered that he had been bled some time before, and that the blood had been caught in a broken piece of earthenware, which was afterwards thrown away in the bushes. So a search was made for it, it was found, and the old medicine-man of the family took it and worked with it for several days, holding it up and talking to it, and going through other performances with it. When he had completed his incantation, he and the rest of the family took the piece of earthenware to a graveyard one night and buried it.

Some time afterwards the man they wished to kill was taken ill in Los Angeles, and was brought home from there in a paralytic condition, "all twisted up." Soon after he died. Of course the medicine-man who had performed the incantation over the broken piece of pottery, claimed, and without doubt firmly believed, that he had brought about this person's illness and death.

Some medicine-men claim to have the power to make rain,

and go through performances with that end in view. Should it rain within several days, they claim that it is due to their efforts. Should it fail to do so, they seldom lack an excuse; perhaps it is because the people have no faith in them or ridicule them. But a commoner excuse is that some other rainmaker or medicine-man is envious of them, and, when they try to bring rain, works against them, and prevents them from doing so.

Especially do they claim this if a contrary east wind should rise when the clouds are coming up and it looks promising for rain. That is surely the work of some evilly disposed medicine-man who is jealous of them, and made the east wind rise to drive away the rain which was about to fall through their efforts.

CHANGICHNISH, THE RAVEN.

The raven was a bird much feared by the Luiseños. When one of these birds was heard croaking, or seen hovering about a village, or some of the old people dreamed of it, steps were immediately taken to propitiate it. This was done by dancing three nights in succession, and by certain offerings. Each family brought food, such as chia and other delicacies, in a flat or winnowing basket, and placed it on the ground. Around these baskets of food the dance was held. The food was afterwards given to the old people.

The ceremonies held with the object of propitiating the raven have given rise to the belief that Changichnish is a deity, whereas it is really the raven, and instead of being worshiped, the ceremonies are performed with the object of propitiating it.[5] Father Geronimo Boscana, of the mission of San Juan Capistrano, appears to be responsible for this error, as he wrote an account of these ceremonies which was afterwards published by Alfred Robinson in 1846, in a book entitled Life in California. Father

[5] Mr. Sparkman's statement on this point conflicts not only with those of Boscana but of Miss DuBois and other independent investigators. It would seem that his expression is stronger than he would have allowed it to remain had he lived to revise the present paper. In his Luiseño dictionary he defines Changichnish as "the generic name of several things held in superstitious fear or reverence, among them kawialwut, the raven, kuihengish, a large black spider, wiyala, rock crystals, also called Changichnish pohu, and the different species of rattlesnakes." These are all mentioned by Miss DuBois as associated with Chungichnish in native belief.

Boscana spelled the word Chin-ig-chin-ich. His error as to the meaning of the ceremonies is a perfectly natural one, as it is by no means easy to get to the root of Indian beliefs and ceremonies.

Changichnish po-hulit, raven his arrow, is the name given to rock-crystals. These were believed to have been shot by ravens, and were regarded with superstitious fear by the Luiseños. Internal pains were often said to be due to a person having been shot by a raven with one of these "arrows."

SPIRITS AND MONSTERS.

There is still a strong belief in a malevolent water spirit, yuyungviwut. It is thought to belong to both sexes. The male is believed to spirit women away at night to his home in the water, not bodily, but the soul or spirit of the woman, and there to treat her as his wife. The women say they are well treated while there, but have to eat animals that frequent water, such as frogs and snakes. It is usually, though by no means always, young unmarried women who are subject to this delusion, more especially those who are subject to epileptic fits. Women who imagine themselves to be under the dominion of the water spirit often become seriously ill, and are treated by the medicine-men, who claim to be able to frighten the spirit away when it approaches. They pretend to detect its presence by a smell resembling that of stagnant water, the spirit of course being invisible. We have known a medicine-man to be sent for from a distance of a hundred miles to treat a woman who imagined herself to be under the dominion of this spirit. And a strange thing is that women brought up almost entirely among the whites, and others with very little Indian blood, often suffer from this disease, or rather delusion.

Men also sometimes suffer from this delusion, imagining themselves to be under the dominion of a female yuyungviwut. As in the case of the women, they are usually those who are subject to epileptic fits. Many are so afraid of this spirit that they will not call it by its true name, but instead speak of it as an "animal of the water."

There is another water spirit, pavawut, that is believed to inhabit certain springs and ponds of water, which it is thought

to object to having people visit. For this reason many will not put their houses near springs, as they are afraid to incur the anger of this spirit by doing so. It is said sometimes to drag under the water people who bathe near its haunts and to drown them. It is also related that a man shot one at a spring at Santa Margarita, and that the spring immediately dried up. The man also died within a short time.[6]

A being known as koyul is said to have its abode at the main falls of Pauma creek, not the falls that visitors to Palomar mountain sometimes go to see, but others much lower down the cañon. It is thought to object to having people visit its abode, which is exceedingly difficult of access, and many are afraid to do so.

There is a tale to the effect that some twenty-five years ago a man who had been told of the existence of this animal, and warned not to go where it lived, declared that he was not afraid of it, that he would go where it was said to live, and shoot it if he should see it. So one day he entered the cañon and managed to get within a short distance of the falls, when he saw the animal sitting on a large rock directly above the fall. It looked like a very large toad, and was about the size of a man. He shot at it with a rifle he had taken along with him, when it at once jumped from the rock into a deep water-hole at the foot of the falls. As it struck the water a dense mist rose from it and filled the cañon so that it was impossible to see in any direction. At this the man was badly frightened, and would have left the cañon at once, but as he could not see anything, thought it best to wait until the mist cleared off. But though he waited and waited it did not do so, and at last he was obliged to grope his way back out of the cañon as best he could. Strange to say he did not die at once, as every one prophesied he would, but is still alive, or was a few years ago.

A meteor or shooting star is known by the name of Takwish, and is considered to be an animate being that carries people off and devours them. He is believed to have his abode at a locality in the San Jacinto mountains. There is a rocky peak on Palomar

[6] A tradition recorded by Mr. Sparkman regarding the pavawut has been published in the Journal of American Folk-Lore, XXI, 35, 1908.

where it is said he pounds the flesh of his victims to make it tender before devouring it.

BOYS' PUBERTY CEREMONIES.

Puberty ceremonies were generally performed with several boys at once, always of the same clan. The feast-chief[7] of the clan to which the boys belonged never performed the rites himself, but employed another to do so. This was usually the feast-chief of another clan, though any one outside of his own clan who understood the rites might be employed.

At the commencement the boys were given a small quantity of the juice of the roots of the toloache or jimson-weed, *Datura meteloides*. This soon stupefied them, and while they were in this condition dancing was kept up in a circle around them. As soon as they recovered they had to engage in the dance themselves, at the conclusion of which they were taken by the person in charge of the rites into the field, not to their homes. The following day they were required to bathe and be painted, and in the afternoon were taken to the dance again. This was kept up every day for a month, during which time they did not visit their homes.

Even after this period they were under certain restrictions for a year, not being allowed to eat either meat or salt for that time. At the close of the period of restriction the most important rites of all were performed.

A treble circle was drawn on the ground, with an opening on the side facing the north. The outer circle represented the milky way, the middle one night, and the inner one blood. A small pit, representing "hell," was made in the center of the treble circle, and figures of animals were made between this hole and the inner circle, as indicated in the illustration. (Pl. 20.) These figures were made by strewing sand on the ground.[8]

A long lecture or counsel was then given to the youths by the person in charge of the ceremonies. They were told to respect

[7] "Feast-chief" is probably a translation of "capitan de fiesta"; by this term must be understood a chief of ceremonies, the "religious chief" mentioned in the paragraphs concerning government.

[8] This sentence was left incomplete by the author, as if an addition had been intended.

their parents, and all grown-up people; not to shout in the presence of old men; and if an old person came to their house, to welcome him or her, and give them food and water, if they had any; if not, to tell them so politely. Also, if when out hunting they should kill a hare or rabbit, and an old man should ask them for it, they should hand it to him without being angry. They were told to bathe on rising in the morning (which it was formerly customary to do), to eat but little, and not to eat hurriedly, even when hungry. Also not to eat chia, venison, and jackrabbit.[9] If they did not heed the counsel given them, the bear and panther would kill them, the raven would shoot them with bow and arrow, if bitten by a rattlesnake in the field they would die right there, and they would also die if bitten by a black spider. Apmikat would lame them, make them blind, make boils break out on their bodies, or cause them to have consumption. The "breaker" would kill them, the stick would splinter them, and so on.

But if they did heed the counsel given them, they would kill the bear and panther and thereby gain fame. If bitten by a rattlesnake or black spider, they would not die, and if chased by a bear or panther they would not be overtaken. Illness would not attack them, their bodies would be active, and they would win races. They might even on rising to the sky after death live again as one of the stars, which it was said were formerly people. Still other inducements were held out to them to obey the counsel given them, and they were told that their actions were seen by the earth and sky.[9]

At the close of the lecture they were given some flour of white sage seeds mixed with salt. This they were required to chew and eject from their mouths into the small pit in the center of the circle. The lecturer examined this, and by its appearance pretended to tell whether the youth who ejected it had heeded the counsel given him or not. If dry he declared that he had done so, if moist, that he had not. In the latter case, shouts of disapprobation were made by the spectators, who were gathered around the edge of the outer circle.

[9] These sentences were left incomplete by the author, as if additions had been intended.

The following is a literal translation of the lecture or counsel given to boys over the torohaish or tarohaish, ground painting.

See these, these are alive, this is bear panther; these are going to catch you if you are not good and do not respect your elder relations and grown up people. And if you do not believe, these are going to kill you; but if you do believe, everybody is going to see your goodness, and you then will kill bear panther. And you will gain fame and be praised, and your name will be heard everywhere.

See this, this is the raven, who will shoot you with bow and arrow, if you do not put out your winnowing basket. Hearken, do not be a dissembler, do not be heedless, do not eat food of overnight (*i.e.*, do not secretly eat food left after the last meal of the day). Also you will not get angry when you eat, nor must you be angry with your elder relations.

The earth hears you, the sky and wood-mountain see you. If you will believe this you will grow old. And you will see your sons and daughters, and you will counsel them in this manner, when you reach your old age. And if when hunting you should kill a hare or rabbit or deer, and an old man should ask you for it, you will hand it to him at once. Do not be angry when you give it, and do not throw it to him. And when he goes home he will praise you, and you will kill many, and you will be able to shoot straight with the bow.

This is a black-rattlesnake, this is going to bite you. Do not eat venison, do not eat jackrabbit, do not eat chia, do not shout in presence of old people. And if old people arrive at your house, you will welcome them at once. And if you have no food to give them, you will tell them so politely. And if you have, then you will give them some at once, also water. And when they arrive at their house, they will praise your goodness, and you will have a good name. And if a rattlesnake should bite you far off in the field, you will be able to arrive at your house. But if you should be wicked and heedless, you will not arrive; right there you will die in the field. And people will say that you are heedless, and that for that reason the rattlesnake bit you.

See this, this is a black-spider, this is going to bite you. Do not steal food of overnight, do not eat hurriedly when you are hungry. Also when you rise in the early morning you will bathe in the water, and you will always be active, and you will win when you run races. And the people will praise you, and you will shout, and will throw away food. And you will not eat much, or your body is going to be heavy, and you will get tired when you run races, and you will sting your foot with nettle.

See this, this (apmikat) is alive, this is going to break you, this is going to lame you, this is going to cause you to have boils on your body, this is going to make you blind, this is going to give you consumptive cough. In the early morning you will bathe, and if illness comes it will pass you by, also blood (*i.e.*, blood-vomiting sickness).

When you die your spirit will rise to the sky, and people will blow (three times) and will make rise your spirit. And everywhere it will be heard that you have died. And you will drink bitter medicine, and will vomit, and your inside will be clean, and illness will pass you by, and you will grow old,

if you heed this speech. This is what the people of long ago used to talk, that they used to counsel their sons and daughters. In this manner you will counsel your sons and daughters.

This is the breaker, this is going to kill you. Heed this speech and you will grow old. And they will say of you: He grew old because he heeded what he was told. And if you die at some future time you will be spoken of as those of the sky, like the stars. Those it is said were people, who went to the sky and escaped death. And like those will rise your soul (towish). In this manner you will counsel your sons and daughters, should you have any. Pay heed to this speech, that was spoken by the people of long ago.

See this, this is going to splinter you, this is going to give notice what you do, this is going to see you, this is going to know if you have bad thoughts. And if you marry, you will not approach your wife when she is menstruating. The rattlesnake is going to bite you, the stick is going to splinter you, consumption is going to catch you, the earth and sky are going to see if you do anything bad. Listen to this speech and you will grow up and become old. And you will think well of your elder relations, and they will say of you: He is good, whose son is he? In this manner you will counsel your sons and daughters.

And if a bear or panther will wish to catch you, they will not overtake you. And if a rattlesnake or black-spider should bite you, you will not die. But if you are heedless and a despiser, right there you will die. And your spirit (heart) will not rise to the north, or your soul (towish) to the sky.

GIRLS' PUBERTY CEREMONIES.

On arriving at the age of puberty a girl had formerly to undergo certain rites. A hole was dug in the ground several feet deep. In this stones were placed and a fire built to heat them. The stones were afterwards covered with coarse grass or brush, on top of which the girl was placed and covered over. She was kept here for three days and nights, only being taken out a short time each night to be fed, during which interval the stones were also reheated. During the time she was in the pit, dancing and singing was kept up around it. Several girls might be placed in the pit at the same time. It was only necessary that one of them should be of the correct age, the others might be younger. But it was imperative that all should belong to the same clan or family. The feast-chief of the clan to which the girl or girls belonged never performed the rites himself, but employed another who understood them to do so. As in the case of the boys' ceremony this was usually the feast-chief of another clan, though

any one outside of his own clan who understood the rites might be employed.

At the conclusion of the period during which the girl remained in the pit, her face was painted, and a similar painting was also made on a rock. At the end of a month the girl's face was painted in a different manner, and a similar painting was added to the first painting made on the rock. This was repeated every month for a year, each month a different painting being placed on the girl's face, and a similar one added to the original one on the rock. During this year the girl was prohibited from eating either meat or salt. At its close other rites were performed, and a lecture or counsel was given to the girl on much the same lines as that given to the boys. She was cautioned against being stingy, against dissembling, and against looking sidewise. She was also told not to eat jackrabbit or venison. After this lecture the girl was freed from all restrictions.

The girls' rites have not been performed in the upper San Luis Rey valley since 1890, and even then only a part of them were performed. The boys' rites have not been performed for about forty years. The prohibition of eating venison, jackrabbit, and chia was perhaps made because the old people wished these delicacies to be reserved for themselves.[11] The opening left on the north side of the circle of the ground-painting is symbolical of the direction the soul of a good person is supposed to take as it rises to the sky.

The following is a translation of the lecture or counsel given to girls at the puberty ceremonial, yuninish, literally "sprinkling."

See, these are alive, these will think well of you if you believe; and if you do not believe, they are going to kill you, if you are heedless, a dissembler, or stingy. You must not look sideways, must not receive a person in your house with anger, it is not proper. You will drink hot water when you menstruate, and when you are pregnant you will drink bitter medicine.

This will cause you to have your child quickly, as your inside will be clean. And you will roast yourself at the fire (after childbirth), and then your son or daughter will grow up quickly, and sickness will not approach you. But if you are heedless you will not bear your child quickly, and people will speak of your heedlessness.

[11] This may have been partly true, but in the main no doubt, if the Luiseños were like other uncivilized people, genuine religious beliefs were the principal motive.

Your elder relations you must think well of, you will also welcome your daughters-in-law and your brothers-in-law when they arrive at your house. Pay heed to this speech, and at some future time you will go to their house, and they are going to welcome you politely at their house. Do not rob food of overnight; if you have a child it will make him costive, it is also going to make your stomach swell, your eyes are also going to granulate. Pay attention to this speech, do not eat venison or jackrabbit, or your eyes are going to granulate, and people are going to know what you have done by your eyes. And as your son or daughter will grow up, you will bathe in water, and your hair will grow long, and you will not feel cold, and you will be fat, if you bathe in water. And after the puberty rite you will not scratch yourself with your hands, you will scratch yourself with a stick, your body is going to have pimples if you scratch yourself with your hands. Do not neglect to paint yourself, and people will see you, and you will grow old, if you pay attention to this speech, and you will see your sons and daughters.

See these old men and women, these are those who paid attention to this counsel, which is of the grown-up people, and they have already reached old age. Do not forget this that I am telling you, pay heed to this speech, and when you are old like these old people, you will counsel your sons and daughters in like manner, and you will die old. And your spirit will rise northwards to the sky, like the stars, moon, and sun. Perhaps they will speak of you and will blow (three times) and (thereby) cause to rise your spirit and soul to the sky.

MOURNING CEREMONIES AND MOURNING.

After the death of a husband his wife used to cut her hair short as a sign of mourning. Some follow this custom still. If a person was unmarried, some near relative might cut her hair off. A grandmother may do this on the death of a grandchild. Men never cut their hair as a sign of mourning.

When a person dies people blow three times, with the idea of assisting his soul or spirit (heart) to rise to the sky.

Before the arrival of the friars the dead were always cremated.

A religious ceremony of much importance is that of burning the clothes of deceased persons. This is generally held one year after their death. Some clans have now given up this practice, but others still keep it up. When the clothes of a person are to be burnt, the feast-chief of that clan does not perform the ceremony himself, but employs some one else to do so, usually the feast-chief of another clan. Large quantities of calico, and sometimes other articles, are given away at these ceremonies by those

of the deceased person's clan. But those of the same clan are not given any of these articles, only those of the clan of him who performs the ceremonies for the feast-chief.

At the image ceremony images are made of deceased relatives and are burnt. It is customary to give away many articles at this ceremony, but those of the clan to whom the deceased people belong do not receive any of the gifts.

Another religious ceremony which was formerly of great importance was the killing of an eagle or condor, usually the former. Usually a young eagle was taken from the nest when nearly full grown, and kept for some time in captivity, the feast-chief of the clan having charge of it, though others were expected to contribute food towards its support, such as rabbits and ground-squirrels, or, in more recent times, fowls if the former were not available. Sometimes an eagle might be shot for this ceremony, but a live bird was much preferred.

The golden eagle has regular nesting places, to which it is said to return every other year. Some of these places were considered to be the property of the clan, and it was not permissible for another clan to take eagles from them.

APPENDIX.

PLANTS USED BY THE LUISEÑOS.

The following is a list of plants known to have been utilized by the Luiseños for various purposes, with their Luiseño, botanical, and English names when known.

The writer is under obligations to Miss Alice Eastwood of the California Academy of Sciences for the identification of these plants. The equivalent Cahuilla names are from Dr. D. P. Barrows' Ethno-Botany of the Cahuilla Indians of Southern California.

Compositae. Sunflower Family.

Ambrosia artemisiaefolia. **Pachavut. Used as an emetic.**

Artemisia dracunuloides. **Wachish. The seeds are used for food. The plant is used for medicinal purposes.**

Artemisia heterophylla. Pakoshish. Mugwort. Small boys' arrows are sometimes made from this plant, and it is also used medicinally.

Carduus, species unknown. Chochawish. Thistle. Used as greens. The buds are also eaten raw.

Layia (or *Blepharipappus*) *glandulosa.* Solisal. Tidy-tips. The seeds are used for food.

Malacothrix Californica. Makiyal. The seeds are used for food.

Sonchus asper. Posi'kana. Sow thistle. Used for greens.

Helianthus annuus. Paukla. Wild sunflower. The seeds are used for food.

Pluchea borealis. Hangla. Arrow weed. Arrows are sometimes made from this plant. It was also formerly used to roof houses with.

Heterotheca grandiflora. Humut. The mainshafts of arrows are sometimes made from the tall stems of this plant.

Chrysoma (Bigelovia) Parishii. Sanmikut. The seeds are used for food. This plant is much used for medicinal purposes. Sanmikut kawingwish, literally, sanmikut of the mountain, is the name of a glutinous-leaved variety of the preceding. Its seeds are also used for food, and the plant itself medicinally.

Baccharis Douglasii. Morwaxpish. A decoction of the leaves is used to bathe sores and wounds. The wood of this shrub was that mostly used for drilling fire.

Cucurbitaceae. Gourd Family.

Cucurbita foetidissima. Wild squash. The seeds are used for food. The fruit is used when ripe as a substitute for soap.

Echinocystis macrocarpa. Enwish. Spanish, chilicothe. A purgative is made from the roots. The seeds are used in the manufacture of a red paint.

Caprifoliaceae. Honeysuckle Family.

Sambucus glauca. Kutpat. Elderberry. The fruit is much used for food, both fresh and dried. The wood is esteemed for making bows. The flowers are sometimes used as a remedy for female complaints. Cahuilla, hunkwat.

Orobanchaceae. Broom Rape Family.

Orobanche tuberosa. Mashal. Cancer root. The roots are used for food.

Scrophulariaceae. Figwort Family.

Adenostegia (or *Cordylanthus*). Yumayut. Used as an emetic.

Solanaceae. Nightshade Family.

Nicotiana, species unknown. Pavivut. Formerly used as tobacco. Cahuilla, pivat-isil, "coyote tobacco," *Nicotiana attenuata.*

Datura meteloides. Naktomush. Jimson-weed, thorn-apple; Spanish, toloache. The juice of the root was formerly used at the boys' puberty ceremony to induce stupefaction in the novices. Cahuilla, kikisowil.

Solanum Douglasii. Takovshish. Black nightshade. The leaves are used for greens. The juice of the berries is used for inflamed eyes, and also formerly used for tattooing.

Labiatae. Mint Family.

Monardella lanceolata. Huvawut. A tea is made from this plant which is used both medicinally and as a beverage.

Salvia carduacea. Palit. Thistle sage. The seeds are used for food.

Salvia columbariae. Pashal. Spanish, chia. The seeds are much esteemed for food. Cahuilla, pasal.

Micromeria Douglasii. Huvaumal. Yerba buena. A tea is made from this plant which is used partly as a beverage and partly as a medicine.

Ramona stachyoides. Kanavut. Black sage. The seeds are used for food.

Ramona (Audibertia) polystachya. Kashil. White sage. The tops of the stems when tender are peeled and eaten uncooked. The seeds are eaten.

Cactaceae. Cactus Family.

Opuntia. **Navut. This is the general name for the numerous species of the prickly-pear cactus with flat joints. The fruit is eaten both fresh and dried. The seeds are ground into meal and used for food. Cahuilla, navit; the fruit, navityuluku.**

Mutal. A cactus with cylindrical stems. Cholla. Seeds used for food. Cahuilla, mutal; the seeds, wial.

Hydrophyllaceae. Phacelia Family.

Eriodictyon Parryi. **Atovikut. Used for medicinal purposes.**

Eriodictyon tomentosum **or** ***crassifolium.*** **Palwut. Spanish, Yerba santa. Much valued for medicinal purposes.**

Phacelia ramosissima. **Sikimona. Used for greens.**

Polemoniaceae. Gilia Family.

Gilia stamínea. **Chachwomal. The seeds are used for food.**

Asclepiadaceae. Milkweed Family.

Asclepias eriocarpa. **Tokmut. Milkweed. A string fiber is obtained from the stems. A chewing gum is made from the sap which exudes from the stems when cut. Cahuilla,** ***Asclepias erosa,*** **keat;** ***Asclepias sp.,*** **wichmal; chewing gum, chilse.**

Philibertia heterophylla. **Towunla. It is used for food, being eaten raw with salt.**

Apocynaceae. Dogbane Family.

Apocynum cannabinum. Wicha. Indian hemp, dogbane. A string fiber is obtained from the bark. Cahuilla wish is *Phragmites communis,* also used for string.

Gentianaceae. Gentian Family.

Erythraea venusta. Ashoshkit. Spanish, Canchalagua. Tea made from this is used as a remedy for fever.

Ericaceae. Heather Family.

Arctostaphylos Parryi. Kolul. Manzanita. The pulp of the berries is ground and used for food. Cahuilla, fruit of *A. glauca,* tatuka.

Umbelliferae. Parsley Family.

Apium graveolens. Pa'kil. Common celery. Probably not native. Used for greens.

Deweya arguta. `Kaiyat. The root is much esteemed for medicinal purposes.

Violaceae. Violet Family.

Viola pedunculata. Ashla. Violet. The leaves are used as greens.

Malvaceae. Mallow Family.

Sidalcea malvaeflora. Pashangal. Wild hollyhock. Used as greens.

Malvastrum sp. Kaukat. A decoction of the leaves is used as an emetic.

Vitaceae. Grape-vine Family.

Vitis girdiana. Makwit. Wild grape-vine. The fruit is cooked and used for food.

Anacardiaceae. Sumach Family.

Rhus trilobata. Shoval. Sumach, squaw bush, Indian lemonade. From this shrub are obtained the splints that are used to wrap the coil in Luiseño baskets. The berries are ground and used for food. A seed-fan for beating the seeds off plants is made from the twigs of this shrub. Cahuilla, the berry, selittoi.

Rutaceae. Rue Family.

Cneoridium dumosum. Navish. Used for medicine.

Euphorbiaceae. Spurge Family.

Croton Californicus. Shuikawut. Said to be used to procure abortion.

Euphorbia polycarpa. Kenhamal. Spanish, Yerba golondrina. Reputed to be beneficial in the case of rattlesnake bites.

Leguminosae. Pea Family.

Psoralea orbicularis. Shi'kal. Used for greens.

Psoralea macrostachya. Pi'mukvul. A yellow dye is made from the roots of this plant; also a medicine for ulcers and sores.

Lotus strigosus. Tovinal. Used for greens.

Lupinus sp. Mawut. Used for greens.

Trifolium ciliolatum. Mukalwut. Eaten both cooked and raw. The seeds are also used.

Trifolium gracilentum. Ke'kesh. It is eaten both cooked and raw.

Trifolium microcephalum. Pehevi. It is eaten cooked.

Trifolium tridentatum. Chokat. Eaten both cooked and raw. The seeds are also used.

Trifolium obtusiflorum. Shoo'kut. It is eaten cooked.

Prosopis juliflora. Ela. Mesquite. The beans are ground into meal and used for food to a limited extent in some localities. Cahuilla, *Prosopis pubescens,* mesquite screw, kwinyal.

Rosaceae. Rose Family.

Adenostoma fasciculatum. U'ut. Chamisal. Foreshafts of arrows are made of this shrub. A gum, the deposit of a scale-insect, is also obtained from it. Cahuilla, oot.

Rubus parviflorus. Pavlash. Thimbleberry. The fruit is eaten.

Rubus vitifolius. Pikwiax. Wild blackberry. The fruit is eaten. The juice of the berries is sometimes used to stain articles made of wood.

Prunus demissa. Atut. The fruit is eaten. Cahuilla, the fruit, atut.

Cerasus (Prunus) ilicifolia. Chamish. Spanish, Islaya. The fruit is eaten. The kernels are ground into flour and used for food. Cahuilla, chamish.

Heteromeles arbutifolia. Achawut. Toyon, Christmas berry. The berries are used for food.

Saxifragaceae. Saxifrage Family.

Ribes indecorum or ***malvaceum.*** Kawa'wal. The root is used to cure toothache.

Ribes speciosum.

Crassulaceae. Stonecrop Family.

Dudleya (Cotyledon). Topnal. Hen-and-chickens. The juice of the leaves is used.

Cruciferae. Mustard Family.

Brassica nigra. No Luiseño name. Black mustard. Probably not native. Much used for greens.

Lepidium nitidum. Pakil. Peppergrass. The seeds are used for food. The leaves are also used as greens.

Nasturtium officinale. No Luiseño name. Water-cress. Used for greens.

Papaveraceae. Poppy Family.

Eschscholtzia Californica. Ataushanut. California poppy. The leaves are used for greens. The flowers are chewed with chewing gum.

Ficoideae. Carpet-weed or Fig-marigold Family.

Mesembryanthemum aequilaterale. Panavut. Fig marigold. The fruit is eaten.

Portulacaceae. Purslane Family.

Portulaca oleracea. Pokut. Common purslane. Used for greens.

Calandrinia caulescens. Puchakla. Red Maids. Used when tender for greens. The seeds are also used for food.

Montia perfoliata. Towish popa'kwa. Indian lettuce. Used for greens and also eaten raw.

Nyctaginaceae. Four-o'clock Family.

Mirabilis Californica. Nanukvish or tisi. A decoction of the leaves is used as a purgative.

Chenopodiaceae. Pigweed Family.

Chenopodium album. Ket. Lamb's quarter, pigweed. The leaves are used for greens.

Chenopodium Californicum. Kahawut. Soap plant. The root is used for soap. The seeds are used for food. Cahuilla, kehawut.

Saururaceae. Lizard-tail Family.

Houttuynia (Anemopsis) Californica. Chevnash. Spanish, Yerba Mansa. A decoction of the root is used internally and externally.

Polygonaceae. Buckwheat Family.

Rumex, species unknown. Ipelwut. Dock. A decoction of the root is used medicinally.

Urticaceae. Nettle Family.

Urtica holosericea. Shakishla. Stinging nettle. A fiber is obtained from this, but is not much esteemed.

Cupuliferae. Oak Family.

Quercus Californica. Kwila. Black oak, Kellogg's oak. The acorns of this oak are more esteemed for food than those of any other species.

Quercus chrysolepsis. Wiat. Valparaiso oak, drooping live oak, golden cup oak. Acorns esteemed for food, though not so much as those of *Quercus agrifolia* and *Californica.* A gambling toy is made from the large acorn-cups of this oak.

Quercus dumosa. Pawish. Acorns little esteemed for food. The gall-nuts are used to doctor sores and wounds. They are said to possess powerfully astringent properties. Cahuilla, the acorn, kwinyil.

Quercus Engelmanni. Tovashal. White oak. Acorns little esteemed for food. From a deposit made on this oak by a scale insect a chewing gum is obtained. A fungus growing on its decayed wood was formerly used for tinder, when fire was kindled with flint and steel.

Quercus agrifolia. Wiashal. Live oak, red oak, field oak, encina. Acorns esteemed for food, though not so much as those of *Quercus Californica.*

Quercus Wislizeni. I'mushla. Acorns little esteemed for food.

Salicaceae. Willow Family.

Populus Fremonti (probably). Avahut. Cottonwood. Inner bark formerly used to make apron-like garment worn behind by women.

Salix sp. Willow. Wood much used for making bows.

Iridaceae. Iris Family.

Sisyrinchium bellum. Patumkut. Blue-eyed grass. A purgative is made from the roots.

Liliaceae. Lily Family.

Bloomeria aurea. Kawichhal. The bulb is eaten.

Brodiaea capitata. Tokapish. Wild hyacinth. The bulb is eaten.

Chlorogalum parviflorum. Kenut. The bulb is eaten.

Chlorogalum pomeridianum. The fibers covering the bulb are used to make a brush.

Yucca Mohavensis. Hunuvut. The flowers are boiled and eaten. The pods are roasted and eaten. The fiber of this plant is little used by the Luiseños. Cahuilla, hunuvut; the fruit, ninyil.

Yucca Whipplei. Panal. Spanish bayonet or Spanish dagger. The head is used for food. The flowers are boiled and eaten. The scape or stalk is also used for food. Cahuilla, the stalk, panuul; the seed-bags, wawal.

Juncaceae. Rush Family.

Juncus Mertensianus. Pivut. An openwork basket is made from this rush. It is used for gathering acorns, cactus, etc. Another basket made from it is used to cook acorn meal, and another is used as a sieve.

Juncus sp. Shoila. The lower part of this rush furnishes the brown color seen in Luiseño baskets. A mat is also made from it in which articles used at religious ceremonies are kept by the religious chief of the clan. Cahuilla, seil.

Cyperaceae. Sedge Family.

Scirpus sp. Pevesash. Bulrush, tule. The tender young shoots are eaten raw.

Gramineae. Grass Family.

Avena fatua. Arus or Urus. Wild oats. The seed is ground into flour and used for food.

Bromus maximus. Woshhat. The seeds are used for food.

Elymus condensatus. Huikish. The mainshafts of arrows are made from this plant. Cahuilla, pahankis.

Epicampes rigens Californica. Yulalish. The body of the coil of Luiseño baskets is composed of this grass. Cahuilla, *Cinna macroura* (synonym), suul.

Cryptogamia.

Pellaea ornithopus. Wikunmal. Tea fern, bird-claw fern. A decoction of the fronds is used medicinally, and also as a beverage by people who are not ill.

Woodwardia radicans (probably). Mashla. Brake fern. A decoction of the root is used both externally and internally to relieve pain from injuries to the body.

Shakapish. Tree mushroom. Much esteemed for food when growing on cottonwood and willow trees.

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NOTES ON SHOSHONEAN DIALECTS OF SOUTHERN CALIFORNIA

BY
A. L. KROEBER.

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INTRODUCTION.

The following linguistic notes which, like all preceding studies in this series, have been made possible by the generosity of Mrs. Phoebe A. Hearst to the Department of Anthropology of the University of California, are supplementary to a paper on "The Shoshonean Dialects of California," issued in Volume 4 of the

present series of publications in 1907. The orthography described in that paper has been used here.[1] The character ' is however better described as a glottal stop, while aspirations are denoted by ʿ. The Cahuilla, Agua Caliente, Serrano, and Gabrielino information here presented was obtained at Cabezon, Morongo, and San Manuel reservations, in the course of a trip made in 1907, the ethnological results of which have been discussed in a previous paper in this volume, "Ethnography of the Cahuilla Indians." The data on the dialect of San Juan Capistrano were secured at that place late in 1907. The Chemehuevi notes were given in 1908 by two Chemehuevi living among the Mohave at Needles. As vocabularies of Agua Caliente, Gabrielino, and Chemehuevi have been given in the former paper mentioned, new vocabularies that were obtained in these dialects are presented here only in so far as they contain new terms, or words secured in different form. The newly obtained Serrano and Juaneño vocabularies represent dialects that had not been previously heard by the author, and are therefore given in full.

CAHUILLA.

Two Cahuilla vocabularies were obtained, one from Antonio Martinez at Cabezon in the desert, the other from Jose Miguel at Banning. The former represents the dialect of the Colorado desert, the latter the dialect of San Gorgonio Pass and Palm Springs. Antonio Martinez has an unusually clear enunciation. Jose Miguel is from Agua Caliente, the hot springs of Warner's ranch, where the dialect of that name, somewhat different from both Cahuilla and Luiseño, is spoken. He has lived long at Banning, and appears to speak Cahuilla with more readiness than his closely related native speech. The difference between the desert and the Banning dialects of Cahuilla is scarcely perceptible. The only word found in which the two distinctly differ was the example chosen by Jose Miguel to illustrate the diversity: no, which is ki'i in the desert and qowa in the pass. A number

[1] In brief, x is spirant of k, g' of g; q, ɢ, velar; ñ, nasal of k; c, sh; t, palatal; v, bilabial; ì, è, ò, ù, long open; ī, ē, ō, ū, long close; ö, ü, Shoshonean ō, ū; ª ¹, etc., whispered; ª, nasalization; ', glottal stop; ʿ, aspiration; ´, accent.

of words in the desert dialect show the sound ny, as naxanyic, man. In the Banning vocabulary this ny is always replaced by n; but it is not certain whether this difference is dialectic or due to individual peculiarities of the informants. In the following list the first word of each meaning is from the desert, the second from the pass. Where only one word is given, the form is either alike in both dialects or the word was obtained only in the desert.

Vocabulary.

Five, namu-qwan-añ; six, qwan-supli; seven, qon-wi'; eight, qon-pa'; nine, qon-witcu, or qon-witciw'; eleven, peta-supli; twelve, peta-wi'; etc.; sixteen, peta-qwan-supli; twenty, wis namitcumi; twenty-one, wis namitcumi peta-supli; thirty, pas namitcumi; forty, witcius namitcumi; fifty to ninety, namuqwanañes, kwansuplis, qonwis, qonpas, qonwitcius namitcumi; one hundred, supli pisetiwenit.

Man, naxanyic, naxanic; woman, nyitcil, nitcil; boy, qeat, kiat, plural, qiqitam; girl, ñawicmal; girl at puberty, elka; young man, eqwaemal (cf. Luiseño aqwalimai, baby); old man, naxaluwil; old woman, nyicluwil, nicluwil; person, taxliswit, people, taxliswitcem; whites—Spanish-speaking, tciatcem, American, melkitcem.

My father, ne-na; my mother, ni-ye; my son, ne-mailyoa; my daughter, ne-suñama; my elder brother, ne-pas; my younger brother, ne-yul; my elder sister, ne-qic; my younger sister, ne-nawail.

Head, hair, yuluka, nu-yuluka; skull, yuluka-kavoma; forehead, wi'i, ne-wi'i; ear, naq'a, ne-naq'a; eye, he-puc, ne-puc; eyebrows, yul-sev-em; eyelashes, puc-tcavay-am; nose, he-mu, ne-mu; mouth, lip, teeth, tam'a, no-tam'a; tongue, he-nañ, ne-nañ; beard, yul-tamam, ne-yul-tamum (hair-mouth); chin, eyewoka; neck, qily'i, ne-qily'i; throat, quspi; arm, hand, he-ma', ne-ma'; elbow, puviam, ne-puvium; nail, sal'u, ne-sal'o; belly, tii; breast, he-tau', he-tawh, ne-tau; back, husa; back-bone, hululu; ribs, tcawaa; shoulder, sek'a; collarbone, qawinaxa; leg, foot, he'-i,ne'-i; knee, tam'i, ne-tam'i; ankle, he'-i qawa; hip, pakiwa; bone, te'i, plural te'il, ne-te'i; heart, he-sun, ne-sun; liver, nem'a, ne-nem'a; lungs, yavaiwa; kidney, pipiviskun; intestines, sai; brain, yuxosxo; fat, he-wi; fat person, a fat one, wi-k; milk, he-pily; skin, sav'a; blood (''of a person''), he-ewh, he'-ew', ne-ew; ''much blood,'' ew'-il.

Chief, net, kik; shaman, pul; rich, mexana-k; poor, sunsunik'a.

House, kic; my house, ne-ki; houses, kikic; sweat-house, huyetcat; knife, iron, dukvac (sky); road, pit.

Sky, iron, dukvac, dukmatbic; sun, tamiat, damiat; moon, menyil, menil; star, suwet, stars, suwet-em; night, dukmiat; day, hatiwenet, damet-pik; thunder, memla qalet; ''thunder strikes,'' pipivan qalet; lightning, tauwal; rainbow, piaxtem; meteor, ñamñam; large low meteor, living on San Jacinto mountain, dakuc; comet, suwet he-qwasqa (star its-tail); fog, paxic, baxic; rain, wewinyic, wewunic; snow, ice, yuyat; hail, tevaxalem; fire, kut, gut; smoke, miat; steam, mululkal; ash, nisxic; coal, dul; water, pal, bal; ocean,

pal setaxat (water "salty"), or pal nukat (water "made"); stream, wanyic, wanic; lake, pal muyiwenet; spring, pal piskalet (water emerging); well, walinat; earth, temal, demal; earthquake, temal fiilyiac; sand, fiatcic; rock, qawic; mountain, mumawet; cliffs, large rocks, hawayat; salt, iñil; alkali, luñayil.

Wood, tree, qelawat, celawat; grass, brush, samat; mesquite, menyikic; screw mesquite, qwinyal; cottonwood, lavalvaanat; willow, saxat; tree yucca, panuul; chia (sage seeds), pasal; species of seeds, scic, butcil.

Dog, awal; bear, hunwet; wolf, iswet; coyote, isil; deer, sukat; antelope, tenil, plural, tenl-am; horse (probably originally elk), pa-sukat (water-deer? On Cahuilla reservation, in the mountains, the Spanish caballo is used for horse); mountain-sheep, baat; panther, dukwet; wild-cat, dukut; fox, wilyal; skunk, tekwil; badger, hunal; jackrabbit, suic; rabbit, tavut, tevit-em; ground-squirrel, qiñic; rat, qawil.

Bird, wik'ikmal, plural, wik'ikmaily-am; eagle, aswit; condor, yuñawi-vut; buzzard, yuñawi-c; species of hawk, qwaal, kisil, caukuc; owl, mut; ground-owl, ququl; raven, alwat; crows, alwamaily-am; blackbirds, paxante-im; dove, maxivit or maxayil; road-runner, puic; ducks, xanamo-im (cf. Mohave, haneme, duck); hummingbird, dutcil.

Rattlesnake, sewet; gopher-snake, bukawet; milk-snake, palokol; large red snake, tataxul; lizard, mulyak, teaxul-am; turtle, ayil; frog, toad, waxatcil; fish, kiyul.

Fly, a'awat; species of spiders, xwalxwal, kuituk; tarantula, qweyexe-vac; bees, sasañ-em; yellow-jacket, kumsexwet; worms, sivuyal-em; large ants, ant-em; small ants, kuvucnily-am; fleas, mukate-em; lice, qo-am.

White, tewic-neck'c; black, tul-nekic (dul, coal); red, sel-nekic; yellow, teset-nekic; green, blue, tukwic-nekic (dukvac, sky); large, amnawat; small, little, inyis, inyic-il; good, atca-i; it is well, atca-m; bad, elelkwic.

I, ne; thou, e; we, tcemem; ye, emem; this, iv'i; that, he, pe; those, they, pe-em; here, ipa'; there, peña; much, metewet; who, haxi; to-day, iv'ax; yesterday, tuku, duku; tomorrow, tulekaan, paiba; far, xawun; near, suntci; yes, hè'; it is well, atcam; no, ki'i (in desert), qowa (in San Gorgonio pass).

Eat, wayaki; I will eat, hen-wayek-nik; I have eaten, aina-wayaki; hunger, qwalyipic nemok; drink, pa; thirst, takotpic nemuk; run, peniwa-ka; dance, hen-tceñen-ka; sing, hen-taxmu-ka; sleep, en-kup-ka, kup-e, kup-le, kup-le-wet; kill, meka; dead, mukic; alive, mo-ne-hyukal; sit, ne-hiukyal; sit down, nyatce; stand, tawic-nik; I will lie down, ipantatcawe-nik; gamble, hen-tuxpi-ka, malis-wik; cry, hen-ñañ-ik; shout, hen-wai-ka; jump, hen-pepotcax-ka; fly, hen-hiñ-ik; hit with stick, pelwuk-ik; hit with hand, pen-katcin-ka; give, e-max-ik; give me, ne-max-ai.

Velar sounds are readily distinguished from forward k sounds in Cahuilla, though not uttered with the forcible or spirant quality which they often tend to possess in other languages. Glottal stops occur both after final vowels, such as -ma', hand, between vowels, as in te'i, bone, and after consonants preceding

a vowel, such as tam'a, tooth. A final aspirated u or w was observed several times. Witcu, four, is sometimes heard witciwh or witciw'; -ew', blood, and -tau, -taw', breast, are other cases. R, which occurs sparingly in Luiseño, is absent from Cahuilla. Bilabial *v* occurs beside w, as in all Shoshonean dialects known to the author. The sound ñ, the nasal of k, is found initially, finally, and medially. The *ü, ö* sounds so characteristic of most Shoshonean dialects and certain neighboring languages, are wanting in Cahuilla, as they are in Luiseño and Agua Caliente. They are found in Serrano and Gabrielino, and apparently in all Shoshonean dialects except those of the Luiseño-Cahuilla group. Obscure vowels, that is, vowels so pronounced as to be more or less deficient in characteristic quality, are frequently heard.

Stems and Combinations of Consonants.

Consonants in juxtaposition are not rare in Cahuilla, but a regular alternation of vowel and consonant is more frequent. So many of the combinations of consonants are evidently due to composition, reduplication, or shortening under the influence of suffixes, that there is every reason for concluding that Cahuilla stems never contain double consonants. In a small number of words there are combinations of consonants which in the present state of knowledge cannot be explained by any of the above processes. But these words are so few, and have so little inherent appearance of being stems, that they can furnish but very doubtful evidence.

The consonants qw or kw, ly, and ny, in such words as namuqwanañ, qwinal, hipily, qily'i, naxanyic, nyitcil, menyil, wanyic, must be regarded as only developments of consonants that were single in the original forms of these stems—q or k, l, and n. These simple forms often occur in the same stems in Luiseño and other dialects. Qw, ly, and ny are characteristic sounds also of Mohave of the Yuman family, and correspond at least at times to unlabialized and unpalatalized sounds in related dialects. In view of this identity of phenomena, the geographical proximity of Cahuilla and Mohave is undoubtedly of significance.

Among combined consonants due to composition and derivation are: el-el-kwic, bad; nyic-luwil, old woman, from nyitc-il,

woman; ñawic-mal, girl, and other words with diminutive suffix -mal; qon-supli, six, and other composite numerals; tcem-ki, our house, and other forms with pronominal prefixes; mul-ul-kal, steam; descriptive terms such as pal-setaxat, ocean, water-salty; yul-sevem, eyebrows, and yul-tamam, beard, from yul-uka, hair; puc-tcavayam, eyelashes, from puc, eye; tax-liswit, person, atax in other dialects; nis-xic, ash, xoc-xic in other dialects; duk-miat, night, dug-al, dug-it, etc. in other dialects; duk-vac, duk-mat-bic, sky, duk-upar, dog-umbal, in other dialects.

Combined consonants due to duplication of stems are found in yu-xos-xo, brain; ñam-ñam, shooting star; sun-sun-ika, poor; xwal-xwal, spider.

Double consonants caused by the omission of a vowel dropped to compensate for the addition of the plural suffix, are found in tenl-am, antelopes, from singular tenil; probably in ant-em, ants, singular in Luiseño anut; and in paxantc-im, blackbirds, which appears to be derived from a singular paxanic. Piaxt-em, rainbow, may be in the same class.

Somewhat similar to these cases is the numeral supli, one, supul in other dialects.

The only known words for whose double consonants no specific explanations can yet be offered, are: quspi, throat; amnawet, large; suntci, near; lavalvanat, cottonwood; k'iksawal, jimson-weed; kuvucnilyam, small ants; kumsexwet, yellow-jacket; iswet, wolf; hunwet, bear; dukwet, panther; aswit, eagle. It is evident that at least the majority of these are not simple stems. Kuvucnilyam, small ants, and kumsexwet, yellow-jacket,[2] are obviously compounds or derivatives. The four words is-wet, wolf, hun-wet, bear, duk-wet, panther, and as-wit, eagle, seem to contain a final element denoting size or superlativeness. It will be observed that each of these animals is the largest of its kind.[2a] That the stem of iswet is is-, and not isw-, appears from is-il, coyote. Similarly duk-ut is wildcat, corresponding to duk-wut, panther.

The number of known double consonants that are unanalyza-

[2]Compare Boscana, San Juan Capistrano dialect: sejar (=sexar), bee.

[2a] Compare also yunavi-wut or yuñawi-vut, condor, with yuñawi-c, buzzard.

ble is thus so small as to give every prospect of their being resolved before further study, and that the stems of Cahuilla will thus positively prove to contain only simple consonants.

Pronouns.

The pronouns in their independent form and as possessive prefixes are:

1	ne	ne-
2	e	e'e-
3	pe (demonstrative)	pehe-
1	tcemem	tcem-
2	emem	
3	peem (demonstrative)	

Plural.

The following cases of plural forms with the ending -am were noted. All of these are words denoting animate beings, except the terms for stars, beard, eyebrows, and eyelashes. The reason for the use of the plural in the last three is obvious.

Yul-sev-em, yul-tam-am, puc-tcavay-am, suwet-em, qi-qit-am, melkitc-em, taxliswitc-em, tciatc-em, ant-em, kuvucnily-am, sasañ-em, tevit-em, tenl-am, wik'ik-maily-am, xanamo-im, alwamaily-am, tcaxul-am, qo-am, mukatc-em, sivuyal-em. Probably plural are: tevaxal-em, hail, piaxt-em, rainbow, paxantc-im, blackbirds.

A plural by reduplication also occurs. It does not supersede but is accompanied by the suffix -am.

house, kic	houses, ki-kic
boy, qeat	boys, qi-qit-am

It is probable that the expression of the plural by reduplication is restricted. Similar cases have been observed in Luiseño:

man, yaac	men, ya-yitc-am
woman, cuñal	women, cu-cñal-am
old woman, necmal	old women, ne-nicl-am
chief, not	chiefs, no-not-om

It is not quite clear whether the variability of the suffix between -em and -am is dependent upon a partial assimilation of

its vowel to the vowels of the stem or whether it is regulated by more complex rules. In some ten or twelve of the cases obtained -am follows a, o, or u stems and -em i or e stems; whereas in about eight instances the reverse is the case. In a number of the instances, however, the lack of accord between suffix vowel and stem vowels is only apparent. Thus qi-qit-am is derived from a singular qeat. Tenl-am is from a singular tenil, but the i is not radical and is unaccented, and the radical e appears to replace an original back vowel, as in Luiseño tonla.

In Luiseño the vowel of the plural suffix also varies, but instead of being a or e it is either a or o or u. The correspondence of Luiseño o and Cahuilla e is frequent, appearing in the word tonla-tenil just mentioned, as well as in many others, and in the pronouns and pronominal prefixes.

The use of certain terms, denoting parts of the body, without a possessive pronoun and with the noun terminative -l, appears to give them a plural connotation. Bone is te'i; te'i-l was given and translated as "bones." Blood is -ew'; blood as a substance, or "much blood," is ew'-il. It is probable that this suffix is only the common ending -l found on many substantives of animate and inanimate meaning. Its plural or collective force appears to be due to the fact that its occurrence on terms denoting parts of the body is limited to the unusual cases when such words are not accompanied by a possessive pronoun, which must ordinarily be used with all nouns of this class. In such cases these words therefore denote the substance rather than specific objects; from this it is only a step to a collective meaning, and the collective shades naturally into the plural.

Composition and Derivation.

A few compound nouns were observed. Most of these may be compositions of a noun with a verbal stem; but yul-tam-am, beard, is undoubtedly derived from yul-uka, hair, yu-la in Luiseño, and tam'a, mouth or tooth. Pa-sukat, horse, in other dialects apparently elk, may be "water-deer."[3] If these cases are

[3] Unless pa- means true, real, as it is said to in "Pa-ute." Compare Gabrielino pa-wicokot, condor.

correct, they are interesting in view of Mr. P. S. Sparkman's statement that there is no known compound noun in the Luiseño language.[4]

The noun-ending -mal is a diminutive. It is found also in Luiseño. Before the plural -am this suffix in Cahuilla becomes -maily-. Adjectives of color end in -nekic. Black, dul-nekic, seems to mean "charcoal color." The suffix -s gives the numerals adverbial force, with the meaning of "the number of times." Two is wi. Twice is wi-s. These -s forms are used in forming the higher numerals by multiplication.

A number of endings on verb stems have been observed, though their meanings are too far from determination to render their discussion profitable. They are -ka, -nik and -ik, -i and -e, -le, -le-wet, -am, and -nemok, with the prefix or preposed particle hen-. The common Luiseño imperative ending -x has not been heard.

Noun Endings.

It has been said[5] that in all Shoshonean dialects, and probably throughout the whole Uto-Aztekan family, it appears "that a noun cannot stand as a naked stem, but requires a suffix; but that any form of composition into which the stem enters, such as the addition of a possessive affix, makes the terminal suffix unnecessary," and it is dropped. An examination of the new Cahuilla material makes an amplification of this statement possible. Mr. Sparkman has stated[6] that in Luiseño certain nouns, such as those denoting terms of relationship and parts of the body, cannot occur without a possessive pronoun. This of course is sufficient to distinguish them from other nouns that are usable without possessive prefixes. In Cahuilla such nouns, both animate and inanimate, almost always end either in l, c, or t. There are very few exceptions to this rule. On the other hand, words denoting parts of the body do not show these endings, but with very few exceptions end in a vowel. Many of the terms obtained for

[4] Am. Anthr., n. s., VII, 657, 1905.

[5] Present series, IV, 91.

[6] Loc. cit.

parts of the body were given without a possessive prefix. Thus: yuluka, head; naq'a, ear; tam'a, mouth; quspi, throat, qily'i, neck; and others. If it were not for these non-pronominal forms it might be supposed that words denoting parts of the body possessed the characteristic endings of other nouns, and only failed to show them on account of their constant usage with the pronominal prefix which is incompatible with the ending. Indeed it is possible that such forms as naq'a and tam'a are not good Cahuilla, that they are forms abstracted by the linguistic consciousness of the informant rather than forms which can be used with morphological correctness in connected speech. This, however, is only supposition; and the fact remains that according to the information available, terms for parts of the body differ from other substantives in showing forms like naq'a side by side with prefixed but unabbreviated forms like ne-naq'a, while other nouns must choose between the alternative forms such as ki-c and ne-ki. There is nothing to show that forms like naq'al, naq'at, or naq'ac exist or ever existed in Cahuilla.

The only nouns denoting parts of the body that have been found with a detachable noun-suffix are "bone" (te'i-l) and "blood" (ew'-il) in Cahuilla, and "blood" (ou-la) and "hair" (yu-la) in Luiseño. Their suffix -l has already been mentioned. It is suggestive that these three words are among the few terms signifying parts of the body, that can denote a substance. That is to say, they can refer to the object in general, or to a quantity of it obtained from different individuals, instead of being limited to signifying a part or parts of specific persons or animals.

No terms for parts of the body ending in t have been found, and only one in c, puc, eye, which however is not lost when a possessive prefix is added to the word, and is therefore not a noun-termination in this case. The only others without final vowel observed are: nañ, tongue; puviam, elbow; pily, milk; pipiviskun, kidney; and sun, heart.

Of words other than those denoting parts of the body or terms of relationship, and excluding nouns ending in a verbal component or obtained only in the plural form, the following alone do not show one of the endings -l, -t, -c: ñamñam, shooting star; xwalxwal, spider; kuituk, another species of spider; and elka, a

girl at puberty.[7] It is interesting that two of these four words are reduplicated. In Luiseño a somewhat greater number of such nouns have been found. One of them is also duplicated, three end in -ax, and the remainder in vowels.[8]

A number of nouns which in Cahuilla end in -l, -c, show Luiseño forms in -la, -tca. Some of these nouns occur also in Luiseño without the final -a, but in that case are objective, the normal or subjective form showing the -a. Thus hu-la is given by Mr. Sparkman[9] with the objective hu-l, ki-tca, house, is ki-c in the objective, and to-t, presumably objective, has been found beside the form do-da or to-ta, rock. The Agua Caliente vocabulary previously published, and the one given below, differ in a number of nouns in the presence and absence of final -a. This disagreement is undoubtedly to be explained in the same way, since there is no reason for assuming a different relationship between ki-tca and ki-c in Agua Caliente. This omission of the final -a is however not the only method of expressing the objective case of nouns in Luiseño. In many instances, according to Mr. Sparkman, the objective does not differ from the subjective. In others a suffix -i is used for the objective. Mr. Sparkman gives -hu-y for the objective of hu-la when in composition with a pronominal prefix. Further objective forms with the same suffix are: cuula-i, star, and pu-c'la-i, his nail or its claw. It is doubtful whether the final -a of Luiseño and Agua Caliente is in reality, or in origin, a subjective suffix appended to the noun ending; or whether it is part of the noun ending itself, which

[7] Cahuilla nouns in -l are: menyil, temal, iñil, bal, dul, mululkal, luñayil, tauwal, qwinyal, amul, panuul, pasal, butcil, k'iksawal, nyitcil, naxaluwil and nyicluwil, pul, awal, isil, wilyal, tenil, qawil, tekwil, hunal, qwaal, kisil, ququl, dutcil, maxayil, ayil, tataxul, palokol, kiyul.

Nouns in -c are: kic, dukvac, dukmatbic, ñatcic, qawic, wanyic, nisxic, wewinyic, paxic, dakuc, menyikic, seic, naxanyic, suic, qiñic, yuñawic, Gaukuc, qweyexevac, puic.

Nouns in -t are: tamiat, suwet, tukmiat, mumawet, hawayat, kut, miat, walinat, yuyat, qelawat, samat, lavalvanat, saxat, taxliswit, qeat, huyetcat, pit, net, iswet, hunwet, dukwet, dukut, tavut, sewet, sukat, aswit, yuñawivut, mut, alwat, maxivit, bukawet, aawat, kumsexwet.

[8] About 100 Luiseño names of plants given by Mr. Sparkman in his paper recently published in volume VIII of this series end as follows: in -t, 38; in -l, 24, -la, 11, total -l, 35; in -c (-sh), 19, -s, 1, -tca (-cha), 1, total -c, 21; in other consonants, 1, pikwlax; in vowels, 4: posi'kana, sikimona, pehevi, tisi.

[9] Loc. cit.

from some unknown cause has developed into this expanded form in these two dialects, only, however, to be reduced to its simpler consonantal element when the word is used objectively. In any case this ending is not known to occur in Cahuilla or the dialect of San Juan Capistrano, and appears to be limited, in Luiseño and Agua Caliente, to the subjective case of certain noun-terminations.

The equivalence between Luiseño c and tc in the forms ki-c and ki-tc-a has a number of parallels in this and other dialects. Thus, Cahuilla mokwac, flea, becomes mukatc-em in the plural; nyitc-il, woman, corresponds with nyic-luwil, old woman. Final c is not the only sound for which tc appears as the substitute before vocalic suffixes in Cahuilla: taxliswit, person, is taxliswitc-em in the plural.

It does not appear that the noun suffixes -l, -c, -t are always lost when the stem enters into composition or derivation. Before the plural suffix -am the ending is certainly generally retained in Cahuilla, and cases are not wanting in Luiseño. Tenil is tenl-am in the plural; suwet becomes suwet-em; qeat, qi-qit-am; and mokwac, just given, mukatc-em. The diminutive suffix -mal becomes -maily-am. The only Cahuilla form obtained which appears to show the loss of a noun-ending before the plural suffix is sa-sañ-em, the singular of which, while not obtained, perhaps corresponds to Luiseño sa-sañ-la.[10]

AGUA CALIENTE.

The previously published Agua Caliente vocabulary was gone over with Jose Miguel of the Reservation at Banning, who learned from his mother this dialect intermediate between Luiseño and Cahuilla. Only such words are here presented as he gave in a more or less new form. The differences consist in part of the presence and absence of final a. It appears from the preceding

[10] Boscana, p. 333, gives sejet (sexat), willow, the name of a place, as meaning "place of wild bees," that is, "bee." His accompanying form, sejar pepau, honey, is "bee his-water," and shows sexar, or some similar form, such as c·aka (obtained by the author for "bumble-bee"), to be the San Juan Capistrano word for bee. Compare however Cahuilla kumsexwet, yellow-jacket, wasp, which makes it possible that sexat existed as a parallel variant form in Juaneño.

discussion of the Cahuilla dialect that this ending is a subjective case suffix, and not part of the word itself. Other discrepancies between the two lists are due to the occurrence of certain nouns in one list with the possessive prefix, which causes the loss of their ending. Such are: no-gotapi, gutapi-c; no-hu-ya, hu-l; ne-piv'a. piva-t.

Ten, namadulwanut; eleven, suplawat namixunut; twelve, wi namixunut; twenty, wis namidulwanut.

Woman, newikat; baby, pulyinic; tooth, no-tma; beard, nu-muc-um; nail, nu-cul'u; leg, ne-sivi; blood, no'-ow'; house, kitc-a; my bow, no-gotapi; my arrow, no-hu-ya; my pipe, ni-itcip; my tobacco, ne-piv'a; throwing stick, wakat; sky, tukvatc-a; sun, tamyat-a; night, dukmiat-a; thunder, daucunvat-a; snow, ayu'-ya; fire, kut; smoke, miat-a; ash, xocxic; rock, qawic; sand, haxal (cf. Luiseño ex'la, Gabrielino ŏxar, earth, land); grass, saval; bear, hunwut-a; wolf, iswat-a; coyote, isil-a; deer, sogat-a; skunk, dokal-a; jackrabbit, suitc-a; rabbit, tisaxat; crow, alwat; rattlesnake, sewat; fleas, mugatc-im; my lice, n-ala-m; red, xwat-xwat-ic; small, uku-tsi; good, atca-ya; bad, olol-ic; this, i'i; there, axwa-tc; much, modite-a; who, ha-xa; tomorrow, pañhavecpuk; yes, hoo; no, qai; eat, poye; drink, ba'; dance, tani; sing, hawi; sleep, go'ba; see, noli; sit, natca; walk, wakela.

SAN JUAN CAPISTRANO.

The dialect of San Juan Capistrano, sometimes called San Juaneño, or merely Juaneño, has always been stated to be closely related to Luiseño. The precise degree of its similarity and the nature of its differences to Luiseño have however never been determined. In December, 1907, it was found possible to spend a short time with an elderly Juaneño called Jose de Gracia Cruz, born at the Mission and living almost within hail of it and the present railroad station. The vocabulary obtained from him is given below.

It appears that e and a somewhat approach each other in Juaneño, so that it is at times difficult to decide with which quality a vowel is spoken. Similarly the Juaneño vocabulary often has e where the corresponding word as obtained in Luiseño has a. Glottal stops, indicated by an apostrophe, are quite marked, as in Luiseño. There are a few aspirations after vowels or final consonants, as in the words we', two, and we'sa, four. Comparison with other Shoshonean dialects shows these aspirations to represent a former h, the vowel following which has been lost.

Velar k, written as q, was heard a number of times from the Juaneño informant. It seems likely that all k sounds are produced comparatively far back. *V* is bilabial, as always in Shoshonean. As in the other Luiseño-Cahuilla dialects, *ö* and *ü* are not found. A considerably palatalized t, indicated by t·, was frequently heard where Luiseño has t, especially when this sound is final. An sh sound with similar palatal quality has been denoted by c·. These two sounds usually resemble t^r and c^r and are similar to the palatal sounds of Yokuts, Salinan, and other languages in Central California. The Dravidian sounds of the t^r series are probably similar.

There are instances of combinations of sounds at the ends of words due to the dropping out of unaccented vowels; for instance, nucl, fingernails, and momt·, ocean.

The possessive prefixes are:

1 s. no-, ne-, na-.
2 s. o-.
3 s. po-.
1 pl. tcum-.

Before a-stems, the vowel of the prefix of the first person is a, sometimes o; before e-stems, either e or o; before i-stems, o-stems, u-stems, e, or occasionally o. There thus appears to be assimilation only by a-stems. The primary form of the vowel of the prefix thus seems to vary between o and e, the choice being determined usually, but not always, by a principle of contrast. The vowels of the prefixes of other persons, as well as the Luiseño forms, show no- to be the probable original prefix. The ne-form is paralleled by the Cahuilla prefixes.

A number of the words obtained with possessive prefixes show an ending -m, which cannot well be the plural suffix. Thus ne-muvum, my nose, and sepul ne-pulum, one eye. This -m recalls the final -n which is so frequent on Gabrielino forms with the possessive prefix.

In discussing Cahuilla terms denoting parts of the body, it was pointed out that these lacked noun-endings, and the question was raised whether under any circumstances they could have endings, in that or other Shoshonean dialects of Southern California. Juaneño tama-t·, tooth, seems to answer this question,

until it is remembered that tooth can denote a substance as well as an organ. The form is therefore no doubt parallel with the only other Juaneño term denoting a part of the body found without a prefix, yu-t·, hair, and parallel also to Luiseño and Cahuilla yu-la, ou-la, te·il, hair, blood, bone. The question therefore remains answered negatively for the great mass and most distinctive nouns of this class.

Juaneño shows l where this is the noun-ending of Luiseño, Agua Caliente, and Cahuilla; t or t· as equivalent of the noun-ending t in these other dialects;[11] and tc as equivalent of their c. It will be recalled from what has been said in connection with Cahuilla that there is some approximation to this last equivalence in Luiseño, where the ending c, when followed by the subjective suffix -a or other vowels, becomes tc, as in ki-tc-a, house. Juaneño, like Cahuilla, does not show the subjective suffix -a of Luiseño and Agua Caliente.

Altogether the dialect of San Juan Capistrano shows no approximation to Gabrielino[12] and cannot be considered in any way a link between the Gabrielino and Luiseño-Cahuilla groups. Within the Luiseño-Cahuilla group its closest relations are all to Luiseño. It is a subdivision or dialect of Luiseño rather than a branch of the general Luiseño-Cahuilla group.

Vocabulary.

One to five, sepul, we', pahai, we'sa', maha'r.

Man, yeitc; woman, coñwāl; boy, amaiamel; girl, ne-witmal; baby, eme'tikile; old man, naxanman; old woman, necimel; people, atāx-em.

My father, no-na'; my, his mother, ne-yo', po-yo'; my son, no-qā'm; my daughter, ne-cwā'm; my older brother, no-pā'c; my younger brother, no-pè't; my older sister, no-qè's; my younger sister, ne-pī't; my grandfather's father, no-piwu; my mother's mother, no-tu.

Head, hair, yut·, ne-yu; ear, na-naqam; eye, ne-pulum; nose, ne-muvum; mouth, no-t·em; tongue, ne-wèyem; tooth, tama't·; beard, ne-mūc·; neck, no-qlem; nail, nu-cl; hand, arm, na-mā; finger, thumb, ne-yo'; belly, ne-le'em; breast, na-ālem; back-bone, na-mātcam; leg, ne-qāsem; foot, ne'-e';

[11] On the other hand Juañeno shows yu-t·, hair, where Luiseño has yu-la. This is one of many instances proving that the Shoshonean noun-endings can not be traced from dialect to dialect with only physiological modifications. Besides phonetic change, analogy or other psychological factors have often been of determining influence.

[12] Except the possible relation of -m to Gabrielino -n on nouns with a possessive prefix.

(bone, ne-wè'seqai); heart, ne-c·ūn; liver, ne-nòm; blood, no-o'u, o-ou; lungs, na-s·vas-va; intestines, ne-c·l.

House, kitc; my house, ne-ki; your house, c-ki; sweathouse, ha'selitc; ceremonial enclosure, wa'ngutc; my bow, ne-qutup; my arrow, no-hu'; my knife, no-pq; my pipe, no-hūqup; tobacco, pivet, nepivem; pottery jar, qasa'mal; metate, no-t·o'; mortar, no-t·ō'pe.

Sky, dūpitc; sun, tcme't; moon, mòil; star, c·ūel; night, tūkme't; day, tcme-fia; rain, qwacq; snow, yūit; fire, qu't; smoke, qūmet; ashes, tè'lefietc; water, pā'l; land, èxel; sand, beach, èxvel; ocean, mèmt·; stream, wenitc; mountain, qawī'tc; plain, palvintc; stone, tòt·; wood, qalāut.

Dog, awāl; bear, hunut·; coyote, ano'; deer, c·ūkt·; mountain sheep, bāat·; panther, tukut·; fox, qawcutc; jackrabbit, cuitc; rabbit, dòct; ground-squirrel, qènte (Luiseño form given as qèāitc); mole (topo), mòt.

Eagle, acut; buzzard, yuāāvitc; a hawk, pākal; raven, cawlīret; crow, a'lemel; owl, mūt·; small owl, qoqū'l.

Rattlesnake, cbut·; snake, paxa; small fish, kuyūmal; large fish, tucuxuc; whale, keyòt.

Fly, qwaal; flies, qwaalem; flea, moqwā'itc; louse, ola't; bees, cā'cafal-em; jicote, bumblebee, c-aka'; honey, c-aka po-pa'u, bee its-water.

White, wāixant·; black, yevātxant·; red, koya'xu'itc; large, awo'lov; good, polòv; bad, hī'tciqutc; much, muyuk; little, wena'ma'l.

I, nò; thou, om; we, tcā'am; ye, omo'm.

This, evi'; these, evi'm; that, wena'l; here, ava'; there, wana'; who, hax; what, hi'ts; where, metca'; near, metcqen; far, wam; up, ètc; down, tòx; north, tamāmek; south, kwīmek; today, pil'qale; yesterday, tukuv; tomorrow, potòqole; yes, ohò'; no, qāi.

Eat, natcxun; drink, pa'; run, hux; dance, pel'e; sing, hèlex; sleep, kūpla; speak, tèle; see, tèli'we; hear, naqma'a; kill, mòra; strike, cīkwa; sit, pevc'x; walk, wekale; stand, yū'liña, yū'dafia.

hiqas o-t·uñ, what is your name?

nīk sepul, give me one.

sepul ne-pulum, one (my) eye.

pā' pāl, toma agua.

pal pecī'tcqale, sale l'agua.

evè yuitc e'xel, this land, la tierra de aqui.

yemaik tapye tcònem, long ago all died, ya se murieron todos. (Luiseño yumaik, formerly; tap, to die, plural; tcounum, all.)

nonòxe ā'aq supul, I alone remain.

pò'xonem atāxem, puros Indios, true Indians.

metca's o-ki, where is your house?

tcum-tela, our language.

wera'x, awake!

hūcu-vai, or: hūcu om wai, smoke, you!

Wiyò't, dios (Ouiot, Wiyot).

Tciñitcnitc, tciñitcnic, diablo (Chinigchinich, Chungichnish).

tòitc, diablo (Luiseño towish, touch, spirit).

manap tòitc, tòitc is coming.

noo'nwom naxa'nmal, ya estoy viejo.

kī'tcmuñigm, southerners.

naqma'a no-tèle, hear my words!

GABRIELINO.

The following Gabrielino vocabulary supplementary of that previously published was obtained from the same informant, Jose Sevaldeo.[13] He had however become so feeble that it was only possible to question him for a short time.

Among the new Gabrielino words given below two are particularly interesting. One is navakit, snow, which is from the Plateau and Pueblo stem *nüva*, for which Southern California vocabularies otherwise show yui-. The other is cuki, tobacco, which is the Yokuts cogon, found also in certain Mono and Kern River dialects. The usual Southern California stem for tobacco, used also in Hopi, is piva.

The sounds of Gabrielino are full and simple, in spite of the presence of *ö* and *ü*, and evidence a regular and easy phonetic system.

Old man, eraxbu; old woman, tuxu; hair, ni-pwan (=head); eye, ni-tsotcon; tongue, ni-noñin; beard, ne-pehan; nail, ni-teur; arm, hand, ni-man; belly, panza, ni-xönan; foot, ni-nev; knee, ni-töñ; bone, ni-èèn; heart, ni-eun; blood, ni-xain; chief, tomiar (?); bow, baitoar; arrow, teoar; pipe, ni-wiku; tobacco, cuki; road, pet; night, yauke; thunder, tauwaro; wind, ahikañ; rain, aqwakin (?); snow, navakit; ash, kocic; ocean, momati; stream, wenot, pa-xait (much water); lake, puini-par; mountain, xai; salt, añor; sand, piri; wood, kota; grass, mamar; dog, wuci; bear, hùnar; wolf, icauvut; coyote, itar or itarü; deer, cukat; antelope, tonar; panther, tukut; jackrabbit, cuit; bird, kakar; eagle, acawut; condor, pawicokot; buzzard, yuñavic; owl, mùhut; crow, aqaukute; rattlesnake, cot; frog, qwarava; flea, mututci; louse, ni-ar; white, rawatai or rawatei; black, yumaxai; red, kwahoxa; large, yoòite; small, tcinùhu; good, tihövkui; bad, tcaite; thou, oma; ye (?), omoma; this, mine; that, piema; here, ikwa; there, muru; all, we; much, ayohin; who, hawo; yesterday, puana; to-morrow, hiamti; yes, èhe; no, xai; eat, kwa-a; drink, pa-a; run, yamimo; dance, yake-a; sing, tcee-a; sleep, yetamku-a; speak, sirawa; see, huta-a; kill, muka-a; sit, yatco; walk, nuñino; work, hoaixo-a; give, ua.

The following Fernandeño words were obtained in 1906 in addition to those already printed:[13]

Young man, koti; young woman, taxai; my father, ne-na; my mother, ni-ok; forehead, mo-koya-n; eyebrow, a-aux; rib, mu-amu-n; skin, mu-tuk; name, a-tuano-n; medicine-man, pāhave; friend, nyèhie; dead, muyòkmuk; sweat-house, hoyātsu; earthquake, yavoyak oxer; night, yayauke; badger,

[13] Present series, IV, 70, 1907. See also VIII, 38, 1908.

cuyui; jackrabbit, cuit; raven, alwut; his, peem; where, hamiña; what, hita; up, hato'-k; down, buxtu-k; drink, pa-ismunaka par.

The possessive prefixes in the San Fernando dialect are, for the first person singular, ne- or occasionally ni-; for the second person, mu- or occasionally mo-; for the third person, a-. The vowel of the possessive prefix is little or not at all dependent on the vowels of the stem.

Most nouns obtained with a possessive prefix in both Fernandeño and Gabrielino show a suffixed -n. There are however a number of such nouns without the -n. His hand has been obtained as a-ma-n; his belly as a-to.

Both Gabrielino and Fernandeño show somewhat unusual demonstrative stems, this being mine, and that peem or piema. The latter stems recurs in Luiseño-Cahuilla po, pe. But the stem mi- as indicative of proximity is not known from other Shoshonean dialects. It probably occurs also in the Fernandeño word mitem, today. Contrary to most Shoshonean dialects, Gabrielino and Fernandeño agree also in showing different stems for their adverbial and nominal or adjectival demonstratives. Here and there are in both dialects respectively ikwa and muru. The principal interrogative stems are the usual Shoshonean ha, who and where, and hi, what.

A characteristic feature of the Gabrielino dialectic group is the frequency of reduplication, apparently to express the plural, a trait which has already been commented upon by Gatschet. It appears that inanimate as well as animate nouns are reduplicated, contrary to the usual Shoshonean custom, and that parts of the body which occur in pairs or greater numbers, such as the ears and the teeth, are normally reduplicated. The reduplication is of the usual Shoshonean type to indicate plurality, consisting of the prefixion of a syllable containing the initial part of the stem, as far as, but no farther, than the first vowel. The reduplicated syllable therefore never ends in a consonant, and accumulation of consonants does not take place. The following instances of reduplication have been observed in the Gabrielino and Fernandeño material collected by the author:

ki-kĭc, houses.
ne-ma-man, my hands.

a-na-nak, his ears.
a-tsö-tsi-n, his eyes.
ni-ta-tam, teeth.
cu-cyot, stars.
ma-mar, grass.
ka-kar, bird.
ya-yauke, night.

The usual Shoshonean plural suffix -m is not altogether wanting, as is shown by Fernandeño daxat, person, darāx-am, people.

Verbal stems show reduplication of a different type from nouns:

muyòk-muk, dead.
yavo-yak (oxer), (earth-)quake.

While it is impossible to speak positively as to phonetic and lexical detail from vocabularies obtained each only from a single informant, it is clear that there is sufficient difference between Gabrielino proper and Fernandeño to necessitate the belief that this dialectic group is neither entirely homogeneous nor even uniform to all intents and purposes. The differences between the pronouns, where Gabrielino shows noma and Fernandeño nömü in the first person, are evidence of this. It is however clear that the two dialects are very much more closely related to each other than to any others.

SERRANO.

The Serrano dialect of Highland and Morongo possesses ö, ü, and the other impure vowels of most Shoshonean dialects; a number of vowels followed by glottal stops; velars and sonants much like those of Cahuilla; palatal t-, which is at first difficult to distinguish from tc; and r; but lacks l. In many cases Serrano r is the direct equivalent of Luiseño-Cahuilla l. The most striking characteristic of this Serrano dialect is a peculiar pronunciation of the vowels, which makes many or most of them sound as if followed by an English r as it is spoken by Americans. Where this quality is most noticeable it has been indicated by ʳ. Some trace of this sound or quality, however, was heard in many words where it was not indicated, and in many cases it was plainer than in such words as English far. Serrano x and c

are difficult to distinguish, and x or h often corresponds to Luiseño-Cahuilla c or s. The informants from whom the following vocabulary was secured are Mrs. Jose Miguel, on the Banning reservation, whose father was from Mission Creek, and whose forms are always placed first; and Santos Manuel, born and living at San Manuel, whose form, if obtained, is the second word given under each meaning.

One to ten, haukup, wor (wur), pahi, watca, maha'tc, pavahai, watc'-kuvik, wa'wutc, ma'kuvik, war-maha'tc (waha-ma'hatc); eleven, pu'pa haupk; twelve, pu'pa wör; etc.; fifteen, pu'pa maha'tc; twenty, wöhö wör-mahatc; thirty, pahi wörmahatc; forty, watca wörmahatc.

Person, takt, people, takt-am; man, wut-ic; woman, nii'xt, nü'ü'xt-it; boy, anyitci, kwakit (=child?); girl, naa'xt-, naxt-; youth, tutciñt, tutcint; old man, wut-iwut-; old woman, niixt-awut-.

Head, forehead, ne-xör, ne-cör; hair, ne-aya, ne-ayün; ear, ne-qarv, ne-qarv^a; eye, no-uva, nu-vu; nose, ne-mukpi, nu-mukpi; mouth, ne-xi't, a-xi't, nü-xüts, nü-cüts; tongue, ni-nañi; tooth, ni-tam-am, a-tam-am, ni-tam; beard, ne-qa'ña-m; chin, ne-öitam; neck, na-moi, nü-mu'; throat, na-ñe'he', nu-ñu'he'; arm, hand, ne-ma, nü-ma; elbow, ni-tca; nail, ne-watc, nü-watc; belly, ni-tur; breast, ni-tunu; back, ni-töxpi; shoulder, ne-xe'ka', ne-ce'e'ke'; leg, ni-tcak; foot, ni-nara, ni-navü; knee, ni-tame'; bone, ne-e'; heart, ne-hun, nu-hun; liver, ni-num; skin, ni-tuk, nu-q'utc; blood, ne-itc, a-itc, ne'-i'tc.

House, kitc; my house, ne-ki, nö-ki; thy house, mö-ki; his house, a-ki; our house, itcam tcö-ki; houses, ki-kitc; sweat-house, ü't-; road, perukt.

Chief, kika; shaman, he'mtc, hü'm'tc.

Sky, tukubitc; sun, tamiat, damiat; moon, möat-, muatc; star, huut-, huutc; stars, huu-m; night, tuk, duk; day, =sun; rainbow, ax'e'nina; cloud, omukt; rain, wöruñut, wuruñut; snow, yuat; hail, töxput; fire, kut, gut; smoke, marat, mera't; ash, kukwut, gukut; coal, tuut-, duutc; water, paat-, batc; ocean, lake, möm't, mum^ut; stream, wanut-; land, earth, tö'i'va'tc, tü'i'va'tc; mountain, qaitc, tceit; rock, dümat, dümut; salt, tcukat, tcukvat; sand, ö'kat, u'k'tc.

Wood, gwotcat, kotcat; grass, haamt; willow, hakat; chia seeds, pahinatc; toloache, manit; tobacco, piv't.

Dog, kwidji, k^wutci; bear, hunat; wolf (kaurt-et-?), wanat-; coyote, wahei, wahi; deer, huka't, hukwa't; mountain-sheep, paa't; panther or wildcat, tukutcuwut, tukut; ground-squirrel, q'e'eñt; badger, hunavt; jackrabbit, huit; rabbit, terokt, dürukt.

Bird, witcit; eagle, ahü'ñt; condor, qwat-, gwaatc; owl, mumt; crow, qwam, gatcauvu't; hummingbird, pitidi.

Rattlesnake, hö'ñt, hü'ñt; frog, wakatat; fish, kihut-, kihutc; fly, pitcutcu-am, pitcutcu-atc; flea, atuict-am, atuict; lice, a'-a'tcam-am, atcüm-itc.

White, yarara; black, törnana; red, xörinka or xödinka; large, atiö't-; small, anyi-tci; good, a'aiye-tc; bad, küxani-tc.

I, nö^a, nö; thou, umi'i, ümii; we, itcam; ye, ümam; this, iv'i; that, he,

ama; those, they, ām; here, ip-ya; there, amk-wa; far, puyañ, ama-it; near, pipc; today, ama-i, mat-; yesterday, ivin; tomorrow, uva'-pyi, uva'-im (the words for today, yesterday, and tomorrow are evidently formed from demonstrative stems); much, wör'; who, hami; "nosotros," haminat.

The last is a term applied to the Gitanemuk and other northern Serrano by their neighbors. It is taken from their language, and said to mean "who is it?" It seems to be generally understood by the Indians as the equivalent of "Serrano" as the designation of a linguistic group.

Eat, raakw, kwaküñ; drink, pa'; sleep, lie, kuman; walk, hatcik; run, ya; stand, tcunurk, pöuviu; sit, nöupk; give, mak; kill, mö'kan; dead, amomki; dance, touxtu; sing, tcatcun; cry, yu'; shout, wi'n; jump, rhanki; fly, hinyik; strike, we'ki'v.

The possessive prefixes as obtained with the stem ki, house, are, first person nö-, ne-, second person mö-, third person a-, first person plural tcö-, second person plural ö-.

The vowels of the Serrano possessive prefixes show a harmonic relation to the stem vowels. In the first person ni- is generally used before a and u stems; ne- before ö, e, i, and sometimes a and u. In a number of cases the San Manuel informant said nü- where the Morongo speaker gave ne-. He also usually made the prefix nu- before u stems. While it appears that the principle determining the vowel of the prefix is primarily one of assimilation, it is also clear that other factors have influence.

As regards words denoting parts of the body, most such nouns do not end in vowels in Serrano, but all obtained lack the detachable noun suffixes.

The plural suffix in all cases noted is -am, except in the word huu-m, stars. The final consonant of the substantive is retained in the words atuict, flea, and takt, person, before the plural suffix. It appears that the final t of these words is the detachable noun ending, but this is not certain. In the words huu-tc, star, pitcutcua-tc, fly, and atcüm-itc, louse, the ending -tc is lost in the formation of the plural. Huu-tc is of interest as the exact equivalent of Luiseño-Cahuilla cu-l, in which the ending is not lost before the plural suffix.

The Gitanemuk dialect of the Serrano group, of which a vocabulary has been previously published, shows possessive prefixes closely similar to those of San Manuel and Morongo Serrano and to those of Gabrielino. The first person singular is ni-; the second person mu-, mo-, or mö-; the third person a-; the first

person plural tca-. The demonstrative stems are i or iv for proximity and am for distance. The substantival demonstratives are formed by an ending -ts, which appears also in the interrogative hamits, who. The adverbial demonstratives here and there are derived from the same stems as this and that. Am-ai, today, appears to be demonstrative, and uv-api, tomorrow, is probably also demonstrative. The interrogative stems are ha for who and where, hi for what. Words denoting colors were obtained with a suffix -k. Most verbs were obtained with a prefix or proclitic ni-, and a few show an analogous a-. It is natural to look upon these elements as subjective parallels to the possessive elements of nouns.

The Möhineyam or Mohave river dialect of the Serrano group shows the plural suffix in the form -am, or -yam after vowels, in all words obtained except. hamahava-yim, Mohave. Huu, star, plural huu-yam, and dagat, person, plural dagat-am, parallel the corresponding southern Serrano forms.

While the Serrano of Highland and of Morongo is the same, it differs from that of the lower Mohave river and of the Tehachapi region, from which vocabularies under the name of Möhineyam and Gitanemuk have been published. There is some difference in stems, and a general phonetic divergence. The two northern dialects lack the peculiar r-like inflection of the vowels of the San Bernardino Serrano. As compared with this southern Serrano, the two northern dialects are quite similar. It therefore appears that a general distinction can be made between the Serrano dialects of the San Bernardino range, and those of the Mohave desert and Tejon region to the north of this range. While all the Serrano dialects are similar enough to be mutually intelligible, they are thus more different than formerly believed.

CHEMEHUEVI.

These notes were taken from an old man named Ashpam, and his wife, in Mohave Valley across the Colorado river from Needles, California. Though living among the Mohave, Ashpam is half Chemehuevi by birth. His wife is entirely of Chemehuevi blood, and was born in Chemehuevi Valley. Neither informant

knowing English, it was necessary to communicate through a Mohave interpreter. This circumstance, combined with the small aptitude for linguistic distinctions evinced by both informants, made it impossible to secure connected texts. It was however possible to obtain material elucidating several phases of the structure of the language, which had presented themselves as problems in a study recently made of the closely similar Ute dialects,[14] especially the relation between the possessive pronouns and the characteristic Shoshonean noun-suffixes.

Pronominal Elements and Noun Endings.

Chemehuevi differs from all the other dialects here considered in suffixing instead of prefixing the pronominal elements. This is a characteristic of the Ute-Chemehuevi group and of the Kern River dialects, whereas all other Shoshonean languages prepose and probably prefix these elements. As in Ute, the possessive suffixes denoting the first and second person are -n and -m. The vowel connected with these varies. It is impossible to consider the vowels preceding the final n or m as parts of the suffix until it shall be clear in each case that they are not the final stem vowel, which is usually inaudible through being whispered, but reappears when a following suffix makes of it a syllable. Words like kan, house, pu', eye, tau, tooth, are almost certainly originally kani, pui, and tawa. This is shown not only by their forms in other dialects, but by the fact that they are occasionally heard as kan^{i} or pu'^{i} in Chemehuevi. The same holds true of Ute. As long as the vowel of the apparent suffix is therefore at least in some cases really radical, it is difficult to assign it positively to the suffix in any word. The a of the pronominal ending in the last words of the following list is however apparently non-radical and part of the suffix.

mùv-im, your nose.
pu-im, your eye, nüni pu-um, my eyes.
tawa-n, my teeth, ümi tau, your teeth.
ag^{i}-on, my tongue, ümi ag^{i}, your tongue.
tümp, mouth, tömp-an, my mouth.
totsi-n, my head.

[14] Amer. Anthr., n. s., X, 74, 1908.

totsiwa-an, my hair.
qura-n, my neck.
mutsaw-un, my beard.
maciteo-on, my nail.
hŏa-n, nŭni hŏa, my bone, bufig-uts' hŏau, dog's bone.
nŭmu-n, my liver.
bag'ap-ĭn, my sandals.
kan-ĭm, your house.
tŏviw-am, your land.
piyŭw-an, my heart.
paw-am, your blood, nŭni pau, my blood, paŭ-p', blood.

The pronominal suffixes are not the only forms used in Chemehuevi to indicate possession. The independent or subjective form of the pronoun placed before a substantive has the same significance. It is therefore possible to say kan-ĭm, your house, or ĭmi kan. The two methods appear with about equal frequency in the material obtained. The same is true in Ute. It is the less surprising that these unabridged preposed forms should occur, when it is recollected that the pronominal suffixes of Ute-Chemehuevi are exceptional and therefore in all probability a later substitute for more original prefixes.

As in other Shoshonean dialects, endings of certain nouns are lost when the possessive pronoun is preposed or suffixed. There are however many nouns that are never provided with such a detachable ending. This fact must be understood before the nature and use of these endings in Ute-Chemehuevi can be discussed. The word kan or kan', house, is invariable as regards use with or without the possessive pronoun. Nŭni kan, my house, kan-ŭm, your house, show the same form of the noun as the word house, kan, itself. -n is therefore not the detachable ending of this word. As there are many similar stems in Chemehuevi, it follows that the noun endings cannot be determined except from instances which show each word in composition, or in use with the possessive pronoun, as well as in its full independent form. Judging from the cases obtained, the most frequent Ute-Chemehuevi ending is -p or -*v*. The majority of nouns with any other termination seem to be stems without a suffix. In the abundance of its nouns used without endings Ute-Chemehuevi differs from Luiseño-Cahuilla, where, as has been shown, nearly every substantive which is not onomatopoetic, duplicated, or denotive of a

part of the body, must, when absolute, carry a suffix. Chemehuevi mar, metate, is the equivalent of Luiseño mal-al, and this of Nahuatl, metl-atl, which by corruption is the origin of the word metate itself.

The following are nouns found without a suffix that is lost before a possessive pronoun: atc, bow; wi, knife (Ute witc); kan', house; mar, metate; ba, water; bag'ap, sandals.

The following nouns have been found to lose their ending when used with the possessive pronoun: paü-p', blood; koa-p, tobacco; ac-u^{m}p, ac-ümp, salt; buñg-uts, dog (Ute, sari-dj; with possessive, sari-*v*uñk). Ute sö-up, sö-añ, lungs, pi-upi, pi-nañ, heart (Chemehuevi piyüw-an = piü-an, my heart), also show detachable endings.[15]

The word töv*i*-p, land or earth, is interesting because the loss of its ending is accompanied by the appearance of a final surd *w*. Your land is töv*iw*-am; my land, nüni töv*iw*. Bone, höa or höau (my bone höa-n), may show a similar ending. Such a final *w* sound crops out also in certain words in Luiseño-Cahuilla and in Nahuatl. Luiseño pala, water, no-pauw, my water; Nahuatl tetl, stone, no-teuh, my stone.

No words denoting parts of the body could be obtained provided with an ending except paü-p', blood. Almost always such words were given accompanied by the possessive pronoun, more frequently the suffix form. When the pronoun is preposed, or the third person is signified, the stem appears in its native form. It does not then show any such overwhelming tendency to end in a vowel as do the stems of Cahuilla terms denoting parts of the body. It is however difficult to speak of this matter on account of the frequent whispered final vowels of Chemehuevi.

Plural, Cases, Diminutive.

A few occurrences of the plural suffix -m and of case postpositions resembling those of Ute were found: puum, eyes;

[15] These forms and the Chemehuevi ones make doubtful the statement (Am. Anthr., n. s., X, 76, 1908), based on the forms tcaxatc-in, my younger brother, and witc-im, your knife, that the Ute noun-endings are not lost before pronominal elements. The final -tc of tcaxatc and witc is perhaps not a noun-ending, though Chemehuevi wi would seem to favor such an explanation for witc. If this -tc is not an ending, the only Ute-Chemehuevi noun-suffix as yet determined is *v*, p.

avatem dawam, many men; kani-vant, in the house; kötc-u-van, in the basket. The suffix -its is a diminutive: aipa-ts, boy; picö-ts, girl; üñap-itc, baby; öcaw-its, old man; mutudj-atc, hummingbird.

Demonstratives and Interrogatives.

The demonstratives and interrogatives, as compared with Ute, are:

Chemehuevi.	*Ute.*
i-tc, i-tc-ma, this.	hin-tc, hin-ai, hin-anuc, this.
i-va, here.	i-vat, here.
ma-g'ai, this, he.	ma-c, this, he, pl. ma-mo-ca.
ma-ña, ma-ñai, mañi, his, him.	ma-ic, ma-ña-ic, his, pl. ma-ma-ic.
ma-va, there.	
u-va-tc, there.	o-va, o-vai, there.
u-an-ma, that.	o-a^{n}c, u-a^{n}c, that, the, he.
	yan, yan-ak, yan-akuc, here, here it is
ha-ña, ha-ñi, who.	in, in-ara, hin-unik, who.
imp-e, himp, what.	imb-, what.
ha-g'ava, where.	
ha-nupai, how much.	

The adverbial ending in both dialects appears to be -va, the substantival or personal to be -ña in Chemehuevi and -c or -ac in Ute. The demonstrative stems are i- (or hin-), ma-, and u- (or o-, perhaps ua). Ute in, who, perhaps rests on misunderstanding, Chemehuevi ha- being the regular Shoshonean stem for who and where. In both dialects imb- occurs for what; the usual Shoshonean form is hi-.

Vocabulary.

The following Chemehuevi words not included in the vocabulary previously printed[16] have been obtained:

Man, dawatc, dawam; baby, üñapitc; head, totsi-n; hair, totsive-an; ear, nañkava-n; eye, pu'', pu-im; mouth, tömpa-n; tongue, ag'-un, ax; tooth, tawa-n, tau; neck, qura-n; throat, baqwa-n; nail, macitco-on; shoulder, añaravitcava-n; arm, upper, añavu-n, lower, mantsakwi-n; hand, maura-n; belly, sawüy-an; back, pitsoqwa-n; leg, yu'-un; foot, nampa-n; knee, dañ-an; bone, höa-n; heart, piyüw-an; liver, nümu-n; blood, baüp'; bow, atc; road, bö; sky, tovump; rain, iwarüx; snow, nüvavi; fire, kun; smoke, gwike; ash, gutcap; coal, ukwiv^{e}; dog, puñguts; bear, bapaux; panther or wild-cat,

[16] Present series, IV, 71, 1907.

duk or dukumutc; skunk, puni; jackrabbit, qam; rabbit, tavutc; owl, uputc; crow, atap^{u}itc; rattlesnake, kwanadjitc; white, tocareman; large, avan; good, haöp, haüp; ye, müni; many, avat-em; see, pun-.

Kawaiisu.

The Chemehuevi material obtained has led to a comparison with the Kawaiisu vocabularies printed in the preceding Shoshonean treatise. Kawaiisu is the most westerly of the Ute-Chemehuevi dialects, being spoken in the Tehachapi mountains. It is separated from Paiute and Chemehuevi by a stretch of territory, the dialects spoken in which, while known to be Shoshonean, are still undetermined. It is quite possible that they are not of the Ute-Chemehuevi group, in which case Kawaiisu would be territorially detached from the remainder of its dialectic division.

Like Ute and Chemehuevi, Kawaiisu shows suffixes for the possessive pronouns. The forms in the published vocabulary are -n, -n^{a}, for the first person, and -m, -m^{i}, -mi for the second person. A second vocabulary, obtained from an informant whose native dialect was that of Kern river, throughout showed -na for my and -bi for your. While these forms appear to be exaggerations, they almost certainly point to -na and -mi as the stem forms for these pronominal suffixes, which suffer some reduction owing to the Ute-Chemehuevi habit of not fully articulating final vowels. There is thus a clear association of final a with the suffix of the first person, and of final i with the suffix of the second person; and in this respect Kawaiisu differs from both Ute and Chemehuevi, in which it seems that the pronominal suffix is either purely consonantal or has a variable vowel preceding instead of following the consonant.

The plural nuwuwu, of nuw^{u}, person, contains probably the Ute-Chemehuevi plural suffix -um, -u*v*, -u. The Kawaiisu numerals obtained end in -i, like those of Chemehuevi. The word obtained for nose, mu*v*its, appears either to mean nostril or to have meant it originally, to judge from the term in other dialects. Büpi, blood, and nuwùpi, liver, show the noun termination -pi. The word yuak^{a} was obtained as meaning world. The same word, yoaka, was obtained from the Serrano with the meaning "moun-

tains," and as the base of the term yoaka-yam, with which the Serrano designate the Ute-Chemehuevi in general. Adjectives of color in Kawaiisu possess an ending -gita, and most verbs were obtained with the ending -nami. The demonstratives, i-tü, this, ma-, that, i-wana, here, u-wenu, there, show the Chemehuevi stems i, ma, and u. The interrogatives are the usual ha- for who and where, and hi for what. The word düvigani, sweat-house, appears to mean "earth-house," and is interesting as a compound of two nouns. This process, however frequent in Nahuatl, is rather rare in Shoshonean. While the word for earth was obtained as dipa in Kawaiisu, düvi has a close analogue in Chemehuevi tövi-p, and gani is house.

KERN RIVER.

The Kern River branch, or Tübatulabal dialect, can only be mentioned here. The possessive my is expressed by -n, your by -ñ. This fact is of significance since of all other Shoshonean dialectic groups Ute-Chemehuevi alone suffixes the possessive pronominal elements. As Tübatulabal is territorially in contact with Kawaiisu, there is the possibility that one group has influenced the other in this respect. The Tübatulabal words for man, woman, and house show a curious form of reduplication to indicate the plural: datwal, adatwal; goim, ogogoim; hanil, ahanhanil. It does not follow that these cases are typical of the formation of the plural throughout the language. Most Shoshonean, and in fact most Uto-Aztekan, dialects show a certain amount of reduplication to express the plural without employing it as the regular or customary means. The word anawic-m, Pleiades, meaning girls and unquestionably plural in meaning, may contain the usual Shoshonean plural suffix -m. Compare anawic-bit, girl, in which -bit is the diminutive; and anabic, sweet. The name which the Tübatulabal apply to the Kawaiisu, Kawishm, and perhaps their designation of the Bankalachi, Toloim,[17] seem also to contain the plural suffix.

A comparison of the practically equivalent Tübatulabal and Bankalachi vocabularies shows several forms denoting parts of

[17] Present series, IV, 110, 124, 1907.

the body used in one case with possessive affix and in the other without. Such are cunan, my heart, and cunal, heart; bunteil and puntsin, eye, the latter really my eye; mupit and mupin, nose. It thus appears that in this dialectic group terms denoting parts of the body are provided with noun endings when they are not used with a possessive pronoun, in which respect the Kern River branch differs from the Southern California and Ute-Chemehuevi dialectic groups.

GIAMINA.

The Giamina have been described[18] as a tribe in the San Joaquin valley, near Poso creek, and of doubtful affiliation. A short vocabulary of about twenty words purporting to be of the Giamina language was obtained from an old man unable to give further information or to render explanations. While these words were clearly Shoshonean, and yet clearly not from any known dialect, the source of information was so slight, open to error, and uncorroborated, that it seemed best not to attempt any definite assignment of Giamina to the scheme of Shoshonean relationships. The possibility is by no means excluded that the vocabulary obtained represents miscellaneous Yokuts corruptions, either individual or tribal, or one or more Shoshonean dialects. It has therefore been subjected to comparison with the mass of Shoshonean dialects, with the following results:

One, tcupu; L-C supul, supli, Gabr. puku, Serr. haukup, K R tcits, U-C cui.

Two, hewe; Gabr. wehe.

Three, pohoim; Gabr., Luis., pahai, Kaw. pehei.

Four, wadja; Gabr., Serr., wadja, U-C watcuw-, Mono watsikw-, L-C witcu*w*, K R nanau.

Five, madjindji; K R mahitciña.

Six, pābahai; Gabr., Serr., pabahai, pabahi.

Person, xŏxinil, xaxinil; K R añhanīl.

Man, *muut*; Fern. mut-īmtü, woman.

Woman, wi'ct; Serr., wihak-, gwihak-.

Deer, piāt; L-C, Serr., K R, baat, paat, mountain-sheep.

House, ni-ku; L-C, Gabr., Serr., nu-ki, my house.

Water, bal, bal-aku; K R, L-C, bal.

[18] *Ibid.*, 126.

Road, bëkt; L-C, Gabr., pet, Serr. perakt.
Mountain, tahakwan; Sh-C, M-P, tuyap.
No, hahiben, ahibiwa; K R hais, aic.
Much, many, om; Mono-Iwai, U-C am-.
Drink, hüüka; U-C, Mono, hei; K R, ii, iü; Hopi, hiiko.
Kill, mik'an; L-C mak-, mek-; Gabr., Serr., K R, muk.

A certain amount of distortion is visible in these alleged Giamina words: hewe for wehe, nü-ku for nu-ki. There is also an element of error: the words given for man and deer are evidently those for woman and mountain-sheep. The vocabulary is however clearly not a corruption of only one Shoshonean dialect, such as might arise from for instance a Tübatulabal division being subjected to isolation and the influence of Yokuts or other linguistically foreign neighbors, or from imperfect apprehension, by a Yokuts group or individual, of a Shoshonean dialect. The material shows most numerous resemblances to the Southern California dialects; next, certain indubitable Kern River affinities; and finally, scattered resemblances to various dialectic divisions. Therefore even if the vocabulary is only a mutilation, and not a real Shoshonean dialect, it is based on acquaintance with Shoshonean speech of several quite distinct branches.

In spite of the uncertainty with which material must at best be invested which was secured under the circumstances obtaining in this case, it is not going too far to admit the possibility that the Giamina vocabulary represents, in however mutilated form, a genuine form of Shoshonean speech, quite distinct from any other known; in other words, a dialectic branch or group coordinate with the major ones of the family. The imperfection and scantiness of the material allows so large an opportunity for the play of accident that it would be hazardous to build any farther on this speculation. Nevertheless the former existence of another distinct dialectic group of Shoshonean in this area is *a priori* not so unlikely as might seem. Besides the quite fundamentally divergent and isolated Kern River branch, the region adjacent to the southernmost Sierra Nevada contains the specialized Shikaviyam dialect, and the also specialized Kawaiisu offshoot of the Ute-Chemehuevi group. Among the Yokuts, the Paleuyami,[19] whose dialect is certainly much distorted from ordi-

[19] Present series, II, 313, 347.

nary Yokuts, occupied Poso creek, the same stream to which the Giamina are attributed. A short distance to the north, on the upper San Joaquin, were the Toltichi,[20] whose relation to the Yokuts, according to the present state of knowledge, was parallel to that which the Giamina bear to the Shoshonean family. The region is therefore one in which the crowding together of distinct languages, or the evolution of local and strongly aberrant forms of speech, has proceeded to an unusual extent. This fact is certain, whether or not recognition is ultimately given to the supposed Giamina dialect. If it is ever proved to have existed, it will not improbably furnish a link between the Kern River and Southern California branches of Shoshonean.

GENERAL COMPARISONS.

A certain amount of vocalic harmony is apparent in most Shoshonean dialects. The direction of this influence is from the stem toward the suffix or prefix. The vowel of the plural suffix in Luiseño-Cahuilla, and the vowel of the possessive prefixes and suffixes in Serrano and probably in Ute-Chemehuevi, undergo a moderate amount of modification in accord with the vowel of the stem. This modification is not mere assimilation.

So far as known reduplication can always be used in the Shoshonean verb. Almost every dialect known presents a few cases of reduplication to indicate the plural of the noun. It is comparatively frequent in Hopi and Gabrielino. Luiseño, Cahuilla, Ute, Tübatulabal, and other dialects each present a few instances. There is nothing to show that in any dialect outside of Hopi and Gabrielino reduplication is used with any considerable number of nouns. Even in these two dialects it is not the only means of forming the plural. In other words, it may be said that reduplication in the noun is always found to some extent in Shoshonean, but is not specially developed nor nearly as characteristic as in Selish and other northwestern languages. The extent of its use in the noun in Shoshonean is much the same as in Nahuatl. In the verb, the entire first syllable may be repeated; to indicate plurality in the noun, the reduplication does not extend beyond the first vowel.

[20] *Ibid.*, II, 354.

A suffix -m expressing the plural of animate nouns occurs in Luiseño-Cahuilla, Gabrielino, Serrano, Ute-Chemehuevi, Hopi, probably Kern River, and may be found in the other dialectic groups. It was therefore part of the hypothetical generalized early Shoshonean, and while it cannot be positively correlated with the Nahuatl plural suffix -me, their identity is very probable, the more so as certain Sonoran languages also use -m for the plural.

The objective suffix -i or -e occurs in two quite divergent Shoshonean groups, Ute-Chemehuevi and Luiseño-Cahuilla. There is therefore reason for believing that this suffix will be found also in other dialectic divisions and that, like the plural suffix, it may have been a characteristic of primitive Shoshonean. This is the more probable from the fact that certain "Piman" languages of Sonora show objective case-suffixes, such as the -e of Cahita.

The pronominal possessive elements are preposed or prefixed in all Shoshonean dialectic groups except Kern River and Ute-Chemehuevi. They are also preposed or prefixed in Nahuatl and the Piman languages. It is therefore clear that this order is the original one, and that the suffixed pronominal elements of Ute-Chemehuevi and Kern River represent a subsequent development.

The pronominal element of the *first person* singular is in all dialects n followed by a vowel. Occasionally this is developed by the addition of a second syllable: noma, nögi, nüni. The *possessive prefix* is also n followed by a vowel, except that in Mono it is i-. The element of the *second person* shows a fundamental type consisting of a vowel followed by m. Such is Luiseño om. More often, however, this form is expanded by the addition of a vowel, as in Gabrielino oma, Serrano ümi, Kern River ümbi, Ute-Chemehuevi ümi, or reduced by loss of the m, as in Cahuilla e and Mono-Paviotso ü. The *possessive prefix* of the second person has its fundamental m before the vowel, except in Shikaviyam; but the use of the vowel without the m appears as in the independent pronoun, in Luiseño, Cahuilla, and Mono. As possessive suffix the element of the second person is also more variable than the first, its -m becoming -ñ in Kern River, whereas -n remains such. The vowels of the pronominal elements are ü, ö, i, e, o, u,

but not a. Representing vowels by o and various consonants by k, the scheme of the two elements is the following:

1 p: no, noko; pref., no-, o- (one dial.); suff., -n.

2 p: om, omo, o; pref., mo-, o-, om- (one dial.); suff., -m, -ñ.

The demonstratives are variable. The stem of "this" and "here" is iv-, in Luiseño-Cahuilla; mine, ik-, in Gabrielino; iv-, ip-, in Serrano; i- in Kern River; itc, i-, iwa-, in Ute-Chemehuevi; i-, io, in Mono-Paviotso; i- in Hopi. These forms point to an original i to indicate nearness, Gabrielino mine being the only exception.

Stems indicating "that" and "there" are more variable, and there are often two in one dialect: wan-, pe or po-, in Luiseño-Cahuilla; pem-, mur-, in Gabrielino; am- in Serrano; üw- in Kern River; ma-, u- or ua-, in Ute-Chemehuevi; a-, ia, in Mono-Paviotso. These indicate a, am, ma, wan, u, po, as demonstrative roots of distance or vague reference.

The interrogatives are much more uniform than the demonstratives. Except for Luiseño-Cahuilla me-, where, the elements, so far as known, are always ha-, who, hi-, what, ha-, where. It is interesting that the stems for "who" and "where" should be alike and contrasted with "what."

Diminutives, such as Luiseño-Cahuilla -mal and the more widely spread -it, -itc, -tsi, -bit of Serrano, Ute-Chemehuevi, Mono-Paviotsi, and Kern River, appear to be frequent in Shoshonean generally, and recall the diminutives, and suffixes of analogous categories, that are so important in Nahuatl. Compositions of two nouns are not frequent in Shoshonean. Incorporation of the noun object into the verb has not been found. It is certainly very little developed, and probably lacking, in all Shoshonean dialects. In fact its existence remains to be proved for any Uto-Aztekan language outside of Nahuatl.

Terms denoting parts of the body appear to lack the characteristic Uto-Atzekan noun-terminations in Luiseño-Cahuilla, Ute-Chemehuevi, and other Shoshonean dialectic groups. Such words are customarily used with possessive affixes, but in the absence of these the noun is not provided with a termination. In the Kern river dialect, however, words denoting parts of the body are provided with such suffixes like other nouns. The same is true in Nahuatl.

The characteristic noun-endings of Uto-Aztekan are employed to varying degrees by different Shoshonean dialects. No dialect is known which applies such an ending to every noun. In addition to words signifying parts of the body, Luiseño-Cahuilla leaves onomatopoetic or reduplicated substantives without a suffix, while Ute-Chemehuevi adds a considerable number of simple stems. A final w, probably aspirated, appears in a limited number of stems—not the same ones—in Luiseño-Cahuilla, Ute-Chemehuevi, and Nahuatl, when the possessive affix causes the loss of the usual ending. The endings themselves show great diversity and cannot yet be correlated between Shoshonean and Nahuatl nor between the major branches of Shoshonean. Shoshonean tl appears on stems which in several Shoshonean dialects are variously provided with different endings. The -p or *v* of Plateau Shoshonean is either -l or -c or -t in Luiseño-Cahuilla. Luiseño-Cahuilla -l is used on some stems which in Ute-Chemehuevi have a suffix, and on others which in that dialectic group possess no ending. It would seem almost as if each dialect, developing with a feeling for the need of noun-endings of this character, had proceeded along its own line of growth, forming new endings, and substituting one for another in this word and that, until at present the various endings of the same word in the several dialectic branches are often unrelated. If, or in so far as, they are correlated, the connections between them promise to prove complex.

The Southern California dialects among themselves show rather regular correspondences. Luiseño-Cahuilla -l is Serrano -tc, Gabrielino -r or -t. Luiseño-Cahuilla -c has various equivalences, -tc, -t, -r, -c or -x. Luiseño-Cahuilla -t is regularly the same in the two other groups. The commonest ending in Southern California is -t; -l and -c are characteristic of Luiseño-Cahuilla, -r of Gabrielino, and -tc of Serrano.

Kern River endings are in general nearer to those of Southern California than to those of the Plateau dialects, being -l and -t. -l corresponds to Luiseño-Cahuilla -l, -c, and -t; -t usually represents Luiseño-Cahuilla -t, but also -l and -c. The most characteristic ending is -l.

The three dialectic groups of the Plateau branch show neither -l, -t, -tc, -c, nor -r, but use -*v* or -p endings. A few stems like ku,—ku-c in Mono-Paviotso, ku-n in Ute-Chemehuevi and Shoshoni-Comanche, ku-t in Southern California and Kern River,—give the appearance of being provided with other endings; but it is not yet certain that such final -c and -n really are detachable noun-terminations. Plateau -*v* and -p both correspond at times to suffixes of the Luiseño -l class and at times of the -t class.

Hopi also possesses different endings. They seem to be reducible to two types, both of syllabic content; one can be represented by -wa, the other by -hö, though the vowels vary. Neither corresponds definitely to any type of Plateau, Kern River, or Southern California ending.

Some determined detachable noun-endings common to three or more Shoshonean dialectic groups are here tabulated. A dash indicates known lack of a suffix.

	H	S-C	U-C	M-P	KR	S	G	L-C
water, pa		—	—	y	l	tc	r	l
fish, kiyu					l	tc	r	l
salt, añ	—		*v*,p	*v*	l		r	l
earth, tevi	—		p	p	l	tc		l
star, su	hö				l	tc	t	l,t
coal, tu	wa		*v*	*v*	l	tc	t	l
arrow, hu	hö		—					l
coyote, is	wa		p	—,p	t	t	r	l
house, ki	hö				l	tc	c,x	c
sky, tukuba	l	n	*v*		l	tc	r	c
stream, wani	—(?)				t	t	t	c
road, pe	hö	—	—		t	t	t	t
fire, ku	hö	n	n	c	t	t		t
rock, tu		p	p	p	t	t	t	t
eagle, as					t	t	t	t
rattlesnake, so	wa				t	t	t	t
mountain, mua					l	t		t
bear, hun	wa				l	t	r	t
mountain-sheep, pa	wa					t		t
panther, tuku	tc	—				t	t,r	t
rabbit, tosoxo						t	t	t
deer, suka						t	t	t
snow, yua						t	t	t
tobacco, piva	—					t	t	t

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THE RELIGIOUS PRACTICES OF THE DIEGUEÑO INDIANS

BY

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INTRODUCTION.

The people known as Diegueño, called by themselves Kawakipai[1] or southern people,[2] occupy the extreme southern part of California. The region which they inhabit coincides approximately with the boundaries of San Diego county. Linguistically they are divided into at least two dialectic groups. One dialect is spoken at the villages or rancherias of Mesa Grande, Santa Ysabel, Capitan Grande, Los Conejos, Sycuan, and Inyaxa. These villages are located on reservations in the northern part of the county. The people now residing at Campo, Manzanita, La Laguna, Cuayapipe, and La Posta reservations, in the southern part of the county, speak a slightly different dialect. During the Spanish occupation of California, the people speaking these dialects were associated in a general way with Mission San Diego. Hence both divisions acquired the designation "Diegueño." The southern dialect is spoken also by the Indians of Yuman family in Lower California immediately across the Mexican border. This latter people may be considered ethnographically identical with the people occupying the southern group of reservations mentioned above. The extent of the territory in the peninsula of Lower California in which this dialect is spoken has

[1] Phonetically the Diegueño language is rather simple. The consonants b, g, h, k, l, m, n, p, r, s, t, are pronounced nearly as in English. The sounds represented by the English d, f, seem to be absent from the language. x in the present paper stands for the sound of German ch. Ordinary l represents a sonant l in which the tip of the tongue rests against the teeth. Small capital L stands for a sound corresponding closely to Welsh l, namely, a surd l. This sound is rather forcible in Diegueño. Of unfamiliar sounds, the following are present: a surd r, written as R; a trilled r, made with the tip of the tongue close to the front of the palate, written *r*; and a bilabial v, written *v*. Following the established usage, the sound of sh in shall is written as c; and correspondingly, the sound of ch in church (=tsh) as tc. A sound resembling the sh sound in shall, but made with the tip of the tongue further to the rear, is written c. Y stands always for a glide, never for a vowel sound. In Luiseño words G represents a velar spirant g or velar r.

The vowels are: a as in father, ē as a in fate, e as e in met, ī as ee in meet, i as in pin, ō as in so, o as a in fall, *o* as u in cup, ū as in rule, u as in put, ü as in the German über. The diphthongs are written oi, ai, and au. Oi represents the sound of oi in boil, ai of ai in aisle, au of au in the German word aus or ow in how.

[2] Miss C. G. DuBois gives "Western Indians" as the name the Diegueño apply to themselves. Univ. Calif. Publ. Am. Arch. Ethn., VIII, 138 note 192, 1908.

not been determined. The Diegueño, together with these neighboring people of Lower California, are part of the great Yuman linguistic stock to which the Yuma, Mohave, Maricopa, Walapai, Havasupai, Yevepai, Cocopa, and the Cochimi and other practically unknown tribes of the greater half of Lower California also belong.

In culture, the Diegueño show a marked similarity to their neighbors, the Luiseño on the north, and the Cahuilla on the northeast. In basket-making these people use almost exclusively the coiled weave. The basket designs of the Diegueño are rather simpler than those of the Luiseño and Cahuilla, and run largely to the horizontal band type. Like their neighbors they manufacture fairly good pottery of a brittle, porous variety. In place of the large conical burden-basket usual in California, the Diegueño use a large burden-net with a packstrap to go across the forehead. Twines made of milkweed, mescal or maguey, and nettle fibres, are employed by them in the manufacture of a large variety of textile objects, such as bags, ceremonial dresses, and the carrying nets just mentioned. From maguey fibre they make excellent sandals, of a type not found in California outside of this southern region. The Diegueño, as well as the Luiseño and Cahuilla, build houses of tule or California bulrush, which are fairly weather-proof and permanent. Although big game is naturally scarce in their habitat, they make a powerful bow of willow, its length and size compensating for the lack of sinew reinforcement. Altogether, in the matter of material culture, the Diegueño seem fully equal to the other people of the State. Alone, among all the tribes of the State, they together with their neighbors the Luiseño, Cahuilla, and Mohave, have achieved the manufacture of pottery and the use of cloth-like textiles.

In religious matters the Diegueño seem to stand almost alone. They have little in common, for instance, with the Mohave, who are their nearest blood-kin in California. Certain of their external ceremonies they share with the Luiseño, their neighbors on the north. The religious systems of the two peoples are not, however, by any means the same. The Luiseño have several rites which are not performed at all by the Diegueño. In regard

to many details, furthermore, even where ceremonies are somewhat similar, the Diegueño occupy an independent position.[2a] In general religious outlook, as in mythology, the two peoples are totally dissimilar.

Most of the rites which the Diegueño have in common with the Luiseño belong to a definite cultus. This cultus is what has been described among the Luiseño as the "Chungichnish worship." Among the Diegueño it is known as awik or Western system. As described elsewhere in the present paper, and in another paper of this series by a different author,[3] this cultus centers around an initiatory rite, which consists in drinking ceremonially a decoction of toloache or jimsonweed, *Datura meteloides*.[3a] In studying the religious practices of the Diegueño a distinction is therefore always to be kept in mind between the rites which belong on the one hand to the cultus and on the other to the ordinary ceremonies, since the latter exhibit a totally different animus, and have no definite relation either to the cultus or to each other.

This cultus seems for several reasons to be a late development among the Diegueño. They possess, in the first place, many ceremonies which are supposed by them to be older than the cultus. A tradition exists that this cultus was first acquired by the mainland peoples only three or four generations ago, from the islands off the coast of southern California, particularly from Santa Catalina and San Clemente. This is very likely the origin of the term awik, "from the west," applied to the ceremonies to-day by the Diegueño. Among the Luiseño and northern Diegueño exist supplementary traditions concerning the spread of this system of rites. The Luiseño say that they taught the practices to the Diegueño, and the Diegueño that they learned

[2a] Am. Anthropologist, n. s. XI, 41-55, 1909.

[3] Univ. Calif. Publ. Am. Arch. Ethn., VIII, 69-186, 1908, "The Religion of the Luiseño Indians of Southern California," by Constance Goddard DuBois. See, also, P. S. Sparkman, "The Culture of the Luiseño Indians," *ibid.*, 187-234, 1908.

[3a] For a religious use of this drug among the Hualapai see John G. Bourke, "On the Border with Crook," p. 165, 1892. The White Mountain Apache also use it (A. Hrdlicka, Bur. Am. Ethn. Bull. 34, p. 25, 1908), mixing it with their mescal for its intoxicating effect. So far as known, its employment is characteristic of this southwestern area.

the practices from the Luiseño. This evidence is of a traditionary nature only. In the southern Diegueño region, however, the cultus began to be celebrated only within the memory of men now living.[4] The same might be said of the remote Cahuilla villages. The writer found old men at both places who remembered when the practices were first introduced from the north. The rituals themselves offer internal evidence of a late adoption by the Diegueño. Of seventy-four songs concerned with these ceremonies obtained by the writer, sixty are in a language said to be Luiseño.[4a] The religious myths of the Diegueño never mention this cult, or any of the practices connected with it.[5] This fact would by itself be almost enough to indicate that this jimsonweed or "awik" cultus is not primarily Diegueño.

We may conclude therefore that there are two component factors in the external religion of the Diegueño, as we find it today. They have certain practices, in the first place, concerning the historical origin of which we have no evidence of any kind. As far as our present purpose is concerned, these may be considered inherently Diegueño. They employ in the second place a large series of practices which, whatever their original source, seem to have come to them through the agency of the Luiseño.

As soon as we leave the matter of general outline, we find among the Diegueño, even in the matter of "awik" practices, evidences of a religious outlook totally different from that of the Luiseño. The Luiseño, for instance, believe in a superhuman being, Chungichnish,[6] practically a divinity. He sends certain

[4] DuBois, op. cit. 74.

[4a] This is probably an incorrect statement so far as the Luiseño dialect is specifically concerned, but is true if Luiseño is understood to mean any Shoshonean language. Most of the Luiseño toloache cult songs are said by themselves to be in the Gabrielino language of the north. See in this connection footnote 55. The fifty HORLOI songs transcribed below contain the sound l only once or twice, but r abundantly. In Luiseño r is rare, but l very frequent. In the San Gabriel dialect Luiseño l regularly changes to r. The original source of these songs is therefore scarcely doubtful. The Diegueño however unquestionably received the songs from the Luiseño.

[5] For the mythology of the Diegueño see Journal of American Folk-Lore, XIV, 181, 1901; XVII, 217, 1904; and XIX, 147, 1906, by Constance Goddard DuBois. Also Amer. Anthropologist, n. s. VII, 627, 1905. Also "Analysis of the Mission Indian Creation Story," by the present writer, Am. Authropologist, n. s. XI, 41, 1909. To this must be added the "Creation Myth" obtained by the writer of the present paper and given below.

[6] Journ. Am. Folk-Lore, XIX, 53, 54, 1906.

[illegible] the rattlesnake, bear, panther, or wolf, to punish [illegible] offenses or omissions.[7] The Diegueño, while they believe that certain misfortunes, among them snake-bites, follow when these identical ceremonies are neglected, look on the whole matter as being impersonal. They have a definite feeling that certain aches in the bones are connected with the non-observance of the awik ceremonies. These aches are called awik wutim or "sickness from the West." The only way to prevent the occurrence of these evils, including snake-bites, is to hold the ritualistic dances. So clear is the association of the two ideas among the Diegueño, that when several people have been bitten by rattlesnakes within a short period, the leader, kwaipai, of the ceremonies is regarded as responsible because he does not order the ceremonies oftener. While confident of the expected effect, however, the Diegueño can give no definite explanation of the cause. There is not the slightest evidence that they believe in a personal god, who sends the punishments.

The Diegueño do conceive, however, that certain extra-human powers or beings exist. These powers are associated with striking natural phenomena. The electric fire-ball or "ball lightning," Chaup, is one such supernatural being. He is thought to have lived once on earth in the form of a man. Diegueño mythology is largely made up of stories about his marvellous acts. He takes in part the place of a "culture hero," since his actions frequently left permanent effects on the world and on mankind.[8] It was he who struck all the animals and plants in the world with a stick, leaving marks of all sorts on them.[9] That is the way the red

[7] DuBois, op. cit., present series, pp. 89, 97, et al. Also Sparkman, op. cit., 222, 223.

[8] Journ. Am. Folk-Lore, XIX, 163, 1906: "When the little boy (Chaup) pulled his uncle's body out of the ground, they cried and talked together. His uncle said, 'You ought not to have done this. . . . When you put me back, (do not) let a breath of wind arise from the place where I am buried.' The little boy tried to do as he was directed . . . but in spite of all his trouble, a breath of air puffed up from the grave; and this is the cause of all the sickness in the world."

[9] *Ibid.*, 161: "When he came to his grandmother's house, he found it full of people of all sorts, such as are now all the animals and plants and everything that lives in the world. . . . The boy took his spear . . . and stood in front of the door and began hitting all these people with his spear. The roadrunner was hit as he ran by and escaped, and the red streak can be seen on the side of his head where it was grazed by the spear. The mountain lion came rolling out and it was hit many times by the spear. You can still see the marks in white lines upon it."

wattle came on the roadrunner's cheek, for instance, and the stripe on the coyote's back. Many of the ceremonies performed by this people are also founded on supposed actions of this hero. This is particularly true of a mourning ceremony, known as the Keruk, southern dialect Wukeruk,[10] in which the people dance holding images. Many such incidents make him out clearly as a "Transformer." Certain of the geographical features of the region inhabited by the Diegueño are explained by reference to another mythical being. A great ridge of white rock near Cuayapipe marks the trail made by Ocean Monster, when he came across the land.[11] The Diegueño know also of a "creator," Tochaipa (also called Chaipakomat), who first gave the world its form and substance. Like the other great beings, however, Tochaipa is no longer considered immanent in the world. There is a curious lack of evidence that either he or any of the other of these powers are ever approached through prayer or ceremonial practices.

The religious practices of the Diegueño will be found, rather curiously, to spring from other sources than their belief in the existence of such supernatural beings. Their important ceremonies are founded on one or the other of two conceptions. One of these is that in early infancy, and again at the period of adolescence, persons of both sexes enter into a peculiar condition of receptivity. They are so firmly convinced of this, that whatever the child or person does or undergoes in these two periods is supposed by them to leave a permanent effect upon body and mind. Numerous religious practices and prohibitions are therefore grouped around these two periods. The inward purpose seems to be about equally to prevent evil and to establish good. Young girls, to illustrate, were carefully prevented during the period of budding womanhood from looking at men. If they should look at men they would certainly smile, and so wrinkle up their faces. If their faces were wrinkled during this receptive or formative period, they would stay wrinkled and ugly through

[10] *Ibid.*, 153: "So the old woman took the shape into her hands and danced with it. (Song of the Image Dance) . . . This was the first time they made a dance for the dead. . . . This is the reason they make the dance of the Images, wukaruk."

[11] See the Creation Myth given below.

after life. When boys were "initiated" at the age of puberty, their heads were carefully freed of lice, under the conviction that if they entered manhood without any parasites in their hair, they would never be troubled in the future. Every newly born infant among the Diegueño was in former times wrapped tightly in soft, nettle-fibre bandages, his limbs being tied down. This was done in order that he might grow up straight and strong. If as an infant he were permitted to twist himself and throw his limbs about, he would grow up to be ungainly, loose-jointed and "rickety." Elaborate ceremonies, especially as regards the period of adolescence in boys and girls, have been built up around such beliefs.

The second motive underlying the Diegueño ceremonies is the belief that the souls of people have a continued existence after the death of the body. This belief is at the bottom of the celebration of complicated mourning rites. Their various beliefs concerning human "spirits" are quite contradictory, but not for that reason any less typical perhaps of primitive thought. The spirits of the dead are in the first place thought to go "to the east." They say that if you go to a certain valley over in the desert (they believe that this valley is the place where mankind first came into existence) and put your ear to the ground, you will hear grunting, footfalls, and the humming of old songs. These sounds are made by spirits of the dead holding the ancient dances. The spirit of each individual is on the other hand supposed to linger about the localities and objects with which he was associated during life. For this reason the Diegueño are afraid to handle or disturb ancient relics, or to invade places where people have formerly lived. They use a certain "medicine song" or charm if engaged with objects associated with dead people, to preclude the possibility of confronting a spirit, or "*diablo*" as they have been taught to call such beings.[12]

The fear of the disembodied human soul seems to lie at the base of their mourning ceremonies. The principal feature of the mourning practices is the incineration of all a dead man's

[12] DuBois, op. cit., p. 124, record 1093: "Two brothers were going along when one was bitten by a rattlesnake and died of the bite. The other was afraid of his spirit. It was following him and terrifying him."

clothes and belongings. A large fire is made at the proper time and after appropriate ceremonies; and the deceased person's property, which has been carefully segregated, is thrown on the fire. The purpose of the incineration is to send the property "east" to its owner. While the smoke and sparks of the burning material drift upward, the assembled people sing:

wa katomi aminy awa is-going essence to-your home
wa katomi aminy awa is-going essence to-your home

The animus of the practice seems to be a wish to send the property "to the east" in order that the dead man may have no reason to return for it.[13] A ceremony of similar import was performed over each dead person, to free his spirit from all desire to linger about the corpse. The old men gather about the body, and press it time and again with their hands in unison. The motion is performed in time to a chant:

wesi wesi kiyi kiyi finished finished
papyau wesi kiyi kiyi . . . finished[14]

At the end of this song, the entire company motion upward with their hands into the air, expelling the breath strongly. The song, as well as the gesture and the "blowing" action, is repeated three times. Then the entire company stamp one foot with a deep grunting sound. This sound was uniformly heard by the present writer as "mwau,"[15] and occurs very often in nearly all Diegueño ceremonies. Following that the entire company quickly expel the breath three times, motioning upward on each occasion. It is thought that after this ceremony the body can be safely handled and prepared for the mortuary rites.

Though disease is often explained in primitive thought as a "possession" by spirits,[16] it is worth while to note that the Diegueño differ from many primitive peoples in this regard. They

[13] This seems to be the fear of a dead man's return common among primitive peoples.

[14] University of California, Department of Anthropology, phonograph record 710(2).

[15] This is the action described by Miss DuBois among the Luiseño as "a breathing groaning invocation". Dr. A. L. Kroeber heard the same as "wiau." Op. cit., p. 182. No meaning for it has ever been discovered.

[16] This belief is reflected, of course, in the New Testament; and was accepted until modern times by the Christian church.

conceive rather that the symptoms of disease are caused by certain actual deleterious substances in the body. It is the business of "doctors" or medicine men to remove these substances. "Sucking" is one method employed. The doctor before beginning operations conceals some small object, such as a seed or a wad of hair, in his mouth. He then sucks the part of the patient affected, and produces this foreign matter as having been sucked directly from the seat of pain or disease. The Diegueño believe that such material objects can be caused to enter any person's body through a practice which partakes something of the nature of sympathetic magic. This practice was particularly effective if a lock of the victim's hair, or something which had been intimately associated with him, could be obtained. For this reason the Diegueño carefully destroy all of their hair when it is cut off as a mark of mourning.

Certain of their practices nevertheless reflect vaguely a belief that disease may be charmed away. When a man for example was taken ill, they stretched him out on the ground and gathered around him. Then they motioned upward three times with the hands, expelling the breath each time. They then danced around him from left to right, stepping sideways and singing:

kwinkui pumaski	
winyum tcapax	. . . she-urinates
tuiyutap	place-(him)-in-middle

At the conclusion of this song, they sat about the patient in a circle. The oldest woman present, taking a small *olla* or pottery cup provided for the purpose, urinated in it. The patient was then sprinkled[17] with an eagle feather, the company chanting:

awisi awisi awisi sprinkling sprinkling sprinkling.[18]

The writer was told by one informant that the people at Mesa Grande were not accustomed to dancing as a cure for disease, but instead, blew tobacco-smoke over the sufferer. Dancing, according to this man, was practiced only by the people who lived in the south, "near the Mohave."

[17] The juice of the jimsonweed or toloache was also used in this way.

[18] The purpose may have been to impart the old woman's tenacity of life to the sick person. A similar idea perhaps is that found in Poland, where a barren woman wears the dress of some neighbor who has a large family.

The religious rites of the Diegueño do not to any great extent center in definite localities. Almost all may be executed in any convenient spot. One reason for this may be that the Diegueño country does not present many striking landmarks around which religious beliefs might center. Every village has a circular dance ground, kept always in readiness, where the dances take place. This is sprinkled and packed down hard to keep dust from rising. In former times these dance-circles, hīma'k, were surrounded with a wall of brush. This was placed upright in the ground and, being held in place by large rocks, served to keep the wind away. This brush enclosure seems to correspond roughly with the Luiseño wamkish or ceremonial enclosure.[19] It is not considered sacred, however, as the Luiseño wamkish is said to have been, nor is it guarded with any secrecy.[20] Among the Diegueño the ceremonial objects were kept in a house called kwusitcnyawa.[21] None but the men concerned in the ceremonies ever entered this house.

Like many primitive people the Diegueño ascribe great importance to religious dances. They always dance to the accompaniment of songs. These songs are set off in a number of series, each one appropriate to a particular ceremony. Such songs are always composed of words and have a definite meaning. They usually describe the manner of dancing or mention some fact connected with the performance of the ceremony. Thus:

kwutukwaik kwutukwaik circle-in-the-other-direction[22]

or:

yaka alolo kewaiya timayaka	lies thistle-sage under she-lies
xalasi kewaiya kewaiya timayaka	willow under under she-lies
timayaka octa kamaali	she-lies that-which . . .
timayaka otca kabasiw	she-lies that-which (is)green[23]

In at least one case, a ceremony known as the Eagle Dance,[24] the songs seem to outline a myth or story. In this usage the

[19] See Boscana, quoted in DuBois, op. cit., p. 77.

[20] *Ibid.*, p. 183.

[21] kwusitc, meaning unknown; -ny, grammatical; awa, house.

[22] A song of the girls' adolescence ceremony, sung while the women danced. See below.

[23] A song of the same ceremony, describing the position of the girls who undergo it. See below.

[24] See the account of the Eagle Ceremony below.

Diegueño resemble the Mohave, among whom the songs regularly tell a story.[25] Each song among the Diegueño consists usually of two or three words, though the number is occasionally as high as seven or eight. These words are usually repeated over and over again. Sometimes the words are distorted in the singing until the meaning becomes somewhat obscure.

The air of the song covers usually only a slight range, though a singer will sometimes introduce variety by inserting a short passage in the octave of the regular pitch. On the whole, their vocal music is not devoid of melody. The singing is usually done by a whole company, one person leading and often beating an accompaniment on a rattle of turtleshell, axnal. Instrumental music outside of the sound of this rattle is practically unknown at the present time. There is in the Diegueño language a word for "flute," the object described being a plain wooden tube with four stops, of the type common in California. The writer has never seen an actual specimen of this instrument among the Diegueño. The whistle, tcaxhwiw, was also formerly known, but neither it nor the flute seem to have had any ceremonial significance. The rhombus or bull-roarer was used by the Diegueño until recent years. It consists of a smooth, narrow piece of greasewood about three feet long, fastened end on to a short twisted rope of milkweed fibre. When swung rapidly around the head of the performer it gives out a deep booming or roaring sound. This instrument was formerly sounded three times as the signal for an assembly for ceremonial purposes.

The religious dancing of the Diegueño does not exhibit much variety of movement. It consists, except in one or two cases, in marching around a central fire. The manner of marching or moving varies, however, for different occasions. In the mourning ceremonies for example, the movement is clockwise in single file. The dancers march face to the front with a sort of twisting movement.[26] In the girls' puberty ceremony, the women who dance hold hands in a circle, while each individual moves side-

[25] See present series, IV, 340, 344; also VIII, 181.

[26] The women formerly wore in this dance skirts or short petticoats made of strips of elder bark (paxaL). This movement is intended to make these skirts swish back and forth.

ways in a contra-clockwise direction. In a ceremony known as the Fire dance, men and women join together and hold hands in a circle. Then the entire circle rotates first in a clockwise and then in a contra-clockwise direction. The individual members alternately run forward and side-step. The only dance which appears in a measure complicated is the so-called "War dance" which is danced by initiates into the awik cultus. The step consists of a jump forward, made with the feet together, followed by a short step with each foot. The general movement of the dance alternates between circling about in contra-clockwise direction, stamping the feet without moving in either direction, and jumping backwards in line. The changes from one manner of dancing to another are instantaneous and always executed in perfect unison. The dance is accompanied throughout by grunting and gesticulation and when in full swing exhibits no little animation. The most picturesque dance among the Diegueño is known as the whirligig, tapakwirp.[27] It is danced in the daytime while the great Mourning Ceremony, Keruk, southern dialect Wukeruk, is in progress. The single performer in this dance, attired in a ceremonial dress of eagle feathers, yipexai, moves rapidly in a clockwise direction around the periphery of a circle, at the same time whirling from left to right. The Diegueño have several other dances, but all of them are of the simple marching type.

Both men and women, as just indicated, have a share in the religious dances of the Diegueño. In some ceremonies both sexes take an active part, as in the early part of the Fire dance for instance. The adolescence ceremonies for girls are the peculiar prerogative of the matrons of each village. Women, however, and all those who have not drunk the kusī, are excluded from the corresponding ceremony for boys. Frequently, however, the sex which does not take active part in a ceremony sings the songs which accompany it. The men, for example, sing during the progress of the girls' ceremony, while the women dance. The women on the other hand sing the songs of the men's "War

[27] This is the dance described variously by Miss DuBois, A. L. Kroeber, and P. S. Sparkman as the Morahash, Tatahuila, and Dance with the Eagle Feather Skirt (present series, VIII, 101, 183).

dance." There is no indication that women ever take active part in those ceremonies which are supposed to concern magic powers. The final part of the Fire dance, in which the performers affect to dance on the hot coals, is danced by men alone. It is certain that women never became "doctors" or magicians. The mother of Chaup is said in the myths to be "just like a man, because she knew everything."[28]

The Diegueño people have of course for some generations been under the Christianizing influence of the Roman Catholic Church. The teachings of Christianity have not, however, wholly eradicated their ancient religion. A good deal of importance is still attached, particularly by the old people, to the native observances. Many of these however have in actual practice fallen into disuse. At the present time only a few dances are regularly or normally practiced. The decadent observances have however been discontinued only within the past twenty-five years. Clear accounts of them are therefore in most cases obtainable. It seems almost certain that the main outline at least of their ceremonial usages remains intact to the present day.

CUSTOMS CONCERNING BIRTH AND ADOLESCENCE.

The expectant mother among the Diegueño refrains as far as possible from meat and salt. This is held to make childbirth less dangerous. At birth the navel string of the infant is cut with a flint knife, hakwuca. A poultice or small mat of pounded white willow bark, myaL, southern dialect meyaL, is then heated at the fire and placed on the infant's abdomen. Among the northern Diegueño a small flat stone perforated at one side, miLaputapa, was used in place of the willow bark. This was thought, by warming the stomach, to cause the child's digestion to be good for life. So far as the present writer could ascertain, no customs attach to the umbilical cord itself. Wrappings or swaddling clothes of nettle fibre, ahorL,[29] were put on the child immediately. As soon as practicable thereafter the infant was bound on a straight "cradle-board" made of willow twigs. This bind-

[28] Journ. Am. Folk-Lore, XVII, 229, 1904.

[29] Compare above, p. 278.

ing on the cradle-board is thought to make his back straight and strong. The people say nowadays that all the old men, who are as a rule remarkably hardy, show the advantage of this practice. The younger generation, who are laid in beds and baby-buggies and other soft places, grow up round-shouldered, and are not sturdy like the older generation.

The customs and restrictions attending adolescence are made the occasion of long and somewhat complicated ceremonies. Boys were put through the rather violent kusī or jimsonweed initiation into manhood.[29a] At this time they were taught the practices which are supposed to prove the possession of magic power. The proper religious knowledge was taught them through the medium of a great "painting" made on the ground in seeds and colored earths. The girls escaped the administration of the jimsonweed drug, and were not shown any painting.[30] Their ceremony had quite a different purpose, and was apparently concerned primarily with the prospect of motherhood. The difference between the two ceremonies might be summed up by saying that the boys' ceremony was primarily an initiation into a ceremonial cultus, while the girls' ceremony referred to their physiological well-being in their future life.

GIRLS' ADOLESCENCE CEREMONY.

The Atanuk, or girls' adolescence ceremony, will be found to correspond closely with the Wukunish ceremony of the Luiseño. There is no internal evidence, however, of a Luiseño source, since the songs throughout are in the Diegueño language. The ceremony is not however mentioned in Diegueño mythology as far as this mythology is known at the present time. The ceremony is the same as that described briefly by Rust[31] and others as the "roasting of girls."

[29a] Cf. p. 274 and note 3[a].

[30] It must be observed that this contradicts the account given of this ceremony by Miss DuBois, op. cit., p. 96. The boys' ceremony is one of the awik or imported series, while the girls' ceremony is thought by the present writer to be older and original with the Diegueño themselves.

[31] H. N. Rust, "A Puberty Ceremony of the Mission Indians," Am. Anthr., n. s. VIII, 28, 1906. For Luiseño accounts see DuBois, op. cit., pp. 93, 174, 224; Am. Anthr., n. s. VII, 625, 1905.

Several girls undergo the ceremony at the same time. At least one of them has to be in the actual period of adolescence, while the others may be either older or younger. A pit, LOPOP, is dug, large enough to accommodate all of the girls when stretched out at full length. This excavation is lined with stones and a large fire kindled in it. When the stones become very hot, the fire is taken out and the pit filled with green herbs. Three kinds are used, white sage or BILTAI, thistle sage, *Salvia carduacea*, or alolo, and common ragweed, *Ambrosia psilostachya*, or XAWOXA. The girls are then brought to the edge of the pit and seated, in the presence of all the people of the village. At a signal the entire company motion upward three times, expelling the breath each time. The leader then fills a basketry cap, NPUHL, with water, and mixes in it crumbled native tobacco, up. Each girl then takes a large drink of the liquid. If there were anything evil or morbid inside of the girl, this drink, it is thought, would cause her to vomit it out, and she would never thereafter be troubled by it. Whatever the case among the Luiseño,[32] this ceremony is not considered by the Dieguefio to be an ordeal. They strive rather after a benign physiological effect. After the girls have drunk this mixture, they are placed at full length, face-downward on the bed of herbs, and covered with a blanket, WŪKWIL, of rabbitskin. Sage-brush, BILTAI, is then piled over them. The heat of the rocks causes a fragrant steam to rise about the girls. This is kept up by occasionally renewing the herbs and putting in new hot rocks. The girls remain in this pit with as little movement as possible as long as they can stand the strain of confinement, except as mentioned below. This is usually about one week, though girls who are not of a nervous disposition stand it for three or four. The longer the confinement, the greater the benefit is supposed to be.

A ceremonial crescent-shaped stone, atulku, (pl. 21, fig. 1), is warmed at the fire and placed in turn between the legs of each girl close against her body.[33] The supposed effect was to warm and soften the abdominal muscles. The quality imparted by

[32] DuBois, op. cit., pp. 94, 178.

[33] Rust, op. cit.

this means was thought to last through life, and to make future motherhood easier for the girls. A garland or "hat" of ragweed, xawoxa, wrapped with tule, asok, is placed on each girl's head. This garland is renewed every day while they remain in the pit. They also wear on their wrists, throughout the "roasting," bracelets made of human hair. Their faces are painted black each morning with straw-charcoal.

Certain restrictions are placed on the girls during the progress of this ceremony and for some time afterward. They are required in the first place, as already noted, to stay in the pit with as little movement as possible, leaving it only for short periods at a time. If they moved about or were restless they would through after life be nervous and discontented. Once every day they are taken out, carefully wrapped in blankets,[34] while the pit is lined with hot rocks and filled with fresh brush. During this period and for as long as possible afterward, the girls abstain absolutely from meat and salt. They are however given plenty of sage-seed mush and drinking water. They are not supposed to look at people, especially at men.[35] They are carefully warned not to touch their hair with their hands. If they do so it will come out. For this reason each girl is given two "scratchers" of shell, or of late years two small sticks of wood, which she uses should scratching become necessary. It is noticeable both in this and the following features that the Diegueño do not show the fear concerning the phenomena of menstrual life in women, which is common among primitive races. The restrictions prescribed during menstruation and during the period of adolescence spring usually among savage peoples from the belief that the glance or touch of a woman in that condition will have a harmful effect on other people or on the world. Among the Diegueño however the restrictions, at least as far as indicated by their adolescence ceremonies, seem to refer rather to the well-being of the girl herself. Outside of the enforced inaction the ceremony under discussion seems to have been rather

[34] Beyond the covering of blankets, the girls in this ceremony seem to have worn no clothing. One informant at Campo, however, said that they wore short skirts of willow-bark, fastened to belts made of milkweed fibre.

[35] Cf. above, p. 277.

The time between chatting, laughing,
cheerfully.
in the pit usually in the afternoon to-
are comfortably fixed, the matrons
them, each woman holding a small
At a signal they wave these branches up
of the older women chant:

cover
fine
eu!

for quite a long time. Then the branches
and the girls sprinkled. The same two

sprink-sprink-sprinkle
ragweed sprinkle sage-brush sprinkle

all the women join hands in a circle about
dance around in a line from left to right.
arms out from her sides and raises first
the other in time to the music. The men sing
while the women dance:

low-down he-is-flying (or sailing)
low-down he-is-flying
eu!

of a bird when he is flying or sailing low, near
is said to refer to the sun.
has gone down, the dancers circle in the oppo-
this is contrary to the course of the sun), while

circle-the-other-way circle-the-other-way
eu!

for these dances to continue all night. A great
of which the following are samples:

dance! dance![36]
let-us see (you) now!
eu!

California phonograph record 744(2).

yaka alolo kewaiya timayaka	lying thistle-sage under she-is-lying[37]
xalasi kewaiya kewaiya	willow under under
timayaka otca kama ali	She-is-lying (under) that-which . . .
timayaka otca kabasiw	She-is-lying (under) that-which (is) green
eu!	eu!
yoyokanaitc yoyokanaitc	you-must-sing you-must-sing[38]
mariyoi mariyoi	you-are-embarrassed you-are-embarrassed
eu!	eu!

After a number of songs of this character, the dancers no longer hold hands, but each woman dances by herself. The following are specimens of the songs sung during this second period:

mai katcyiw	where? shall-we-start-to sing
ipaka tcawam	here we-will-start
kto kaLtco yiwaka	
waikatca waikatca	
eu!	eu!
wiyam tcwa no	he went for
wiyam tcwa nomeskwa	he-went for feather-case-made-of-tule
opwiyam wesoLke	he-went (for) elder-bark-skirt
yipexai wiyam	feather-skirt he-went (for)
eu!	eu!

When the sun rose they sang the following song:

inya-tcopuk amiyo	sunrise I-menstruate
inya-tcopuk tcamico	sunrise . . .
yolami yolami	
kwakwar kwinyor	. . . red
eu!	eu!

On the second and following days of this ceremony it is the custom for the people of neighboring villages to come and join in the ritual. The following song was sung when a party of strangers was seen approaching:

pok nyawiyeu	there they-are-coming[40]
wa xohapi	house they-join-us
eu!	eu!

During the progress of this ceremony each of the girls is tattooed on the face. The process is performed with a cactus thorn and powdered charcoal, and therefore requires some little

[37] *Ibid.*, 745.
[38] *Ibid.*, 746(1).
[39] *Ibid.*, 747(1).
[40] *Ibid.*, 744(1).

time. A little is done every day until the whole is completed. One of the old women begins it on the second day of the "roasting". The usual design is a stripe downward from each corner of the mouth, with sometimes a third stripe down the middle of the chin.[41] A small disc is sometimes tattooed between the eyes. If this tattooing were not done, it is believed that the girls would turn into beetles when they die.

BAD SONGS.

Part of each day, usually the afternoon, is given up to the singing of curious songs which are called by the people "bad" songs. The intent of these songs is to insult and revile the people of hostile villages. The songs name over people in each village who have recently died. With the Dieguefio, as among many primitive races, the naming of a deceased relative or friend is deadly injury. Some of these songs refer to other unpleasant facts about people, or ridicule them in various ways. They are sung by the men, while the women gather in two groups, one at the head and one at the foot of the reclining girls, and dance. This dancing is done by rising on the toes and dropping back on the heels in time to the music. Their hands are at times held out in front, palm upwards, with forearm stiff. At other times they hang loosely. The position is shown in pl. 26, fig. 1. It was impossible, owing to the long skirt worn when the photograph was taken, to determine whether or not the toes are ever lifted from the ground.

Specimens of such songs are the following:

ikitcyau ikitcyau	[42]
amipoitcai	your-daughter
amixomai	your son
arhamanto yaupo	enemies all
aitco tcaxpo	I-name them[43]
nyitco hixpo	I-name them
aminyo sinypo	your-wife
mohnyi sinpo	your-mother-in-law

This song (used by the people of Mesa Grande) refers to a man of another village whose daughter, son, wife, and mother-

[41] Few women show this tattoo at the present day.

[42] University of California phonograph record 729.

[43] These words aitco tcaxpo are said to be "in the language of San Dieguito." Nothing further is known of a dialect there.

in-law had all died within a short period. The village where he lived was said to be near where San Dieguito is now.

A second song referring to the same people was used at Mesa Grande. The people from San Dieguito once came unbidden to Mesa Grande to take part in a festival, so the people there sing this song about them.

kwonyuwai itca	our-relatives they-thought[44]
peyam wiyu	they-come-this-way
pinyai poitcai	Mexican's daughter[45]
nosom morai	(has)-no-sense

The following song is also sung at Mesa Grande, but the singer had forgotten the circumstances to which it refers.

xitoL toyomsa	North (she-was)-sitting
amoitc nya kwasau	they-killed me eating
awa sauits mesiny kersents	(at)-home was girl (proper name)
awa sauits mesiny peRlata	(at)-home was girl (proper name)
awa sauits, etc.	(at)-home was, etc.

The two following songs, one of them a fragment, were obtained at Campo.

peyam wiw	they-come, look!
peyam m^{a}riyoi	they-come a-shameful-(sight)
hamau kokapa	fire around
haminyo sinytci (incomplete)	. . .[46] woman-his

It was formerly the custom in singing certain of these songs to name over all the places and landmarks between the village of the people mentioned in the song and the home of the singer. Many of these place-names are no longer used, however, and the songs are therefore in part forgotten. The following fragments will illustrate the point.

makatco yiwoka	[47]
xitoL ketcuyu	(from-the)-north we-will-bring
kawaka tcawam	(from-the)-east we-will-start
tcoxixa tcoxixa (incomplete)	we-will-name we-will-name
milaiya-a-a xitoL-pi	(people-are)-dead up-north
Monterey-pi milaiya	at-Monterey (people-are)-dead
Pueblo Ariwa yupi (incomplete)	at-Pueblo Ariwa also[48]

[44] University of California phonograph record 728.

[45] "Mexican" is said to have been applied to these people as a term of reproach.

[46] The word was not translated by the informant. Haminyo means sandal in Mohave.

[47] University of California phonograph record 748.

[48] Place-names in Spanish have been introduced into this song.

CONCLUSION OF THE GIRLS' CEREMONY.

With such matters the time elapsed day by day until the girls could no longer endure the inaction of remaining in the pit. As each girl surrendered and came out, she took off her garland and her hair bracelets and left them in the pit to be burned with the brush when the whole ceremony was completed.[49] One informant at Los Conejos spoke of the girls leaving the pit at the end of about a week. According to him, they were then put in a row face downward while four grown women walked on their backs. This was to make them straight. While one woman walked, the others stood at the girls' feet, covering their faces with their hands. For the first month after leaving the pit the faces of these girls were painted black with straw-charcoal. Through the second month they were painted red with vertical stripes, axwitc, of black. Throughout the third month the pattern was a series of horizontal stripes of black, xicamkwir, on a red background. For at least six months after first entering the pit they were supposed to abstain from meat and salt, and to eat very slowly. Otherwise they would be gluttonous in after life. If they abstained, they would live long. At the end of this period they were given a little meat, just a taste. As soon as they began to eat meat their faces were no longer painted.

The corresponding ceremony among the southern Diegueño differed slightly from that performed near Mesa Grande. Only two kinds of herbs seem to have been put by the people of the south into the pit with the girls. They were willow, ayau, and white sage, biLtai. Informants at Campo denied that they used the crescent-stone there. The girls seem to have remained in the pit for a definite period of seven days. In place of the headdress already described they wore a wreath of yellow flowers, miLtasiw. It is denied in the southern region that the girls were given the tobacco-water to drink, as was the case among the Luiseño and the northern Diegueño.[50] They are said also

[49] According to an informant at Mesa Grande, they were sunk or "buried" in a large spring near the location of the present rancheria at that place.

[50] DuBois, op. cit., pp. 94, 176; Am. Anthr., n. s. VIII, 32, 1906.

to have worn skirts of willow-bark, caiyula, fastened to a belt of milkweed fibre. Mention is made at Campo of a daily bath taken by all the girls during the progress of the ceremony.[51] The Diegueño, whenever questioned, say that the purpose of the ceremony is to make the girls live long.

In the corresponding Luiseño ceremony[52] the girls are said to have had a footrace and to have painted the rocks in the neighborhood of their village. Rock-paintings exist in the Diegueño country, but are said to have been made by the boys in connection with another ceremony, the description of which is as follows:

BOYS' ADOLESCENCE CEREMONY.

The boys' puberty or toloache ceremony among the Diegueño is similar to the corresponding ceremony[52a] performed by the Luiseño. The songs are partly sung in the Luiseño language. The accounts of the Diegueño ceremony obtained by the present writer differ from each other in a number of minor details. They also differ somewhat from the published accounts of the Luiseño rite. In the matter of the so-called ground-painting or sand picture made for the instruction of the initiates, the Diegueño and Luiseño usages seem especially to differ.

With the Diegueño, as with the Luiseño, the ceremony is essentially an initiation. It begins with the administration of an intoxicating extract of the jimson-weed, *Datura meteloides*, Spanish toloache, Diegueño kusī. The boys and men who have drunk this decoction may take part subsequently in certain ceremonies. These practices are never participated in by outsiders. Besides this actual privilege, the initiates theoretically obtain at the time certain magic or shamanistic powers. There exist a number of tricks, such as dancing on the fire or killing an eagle by witchcraft, which are passed along to all the initiates. Those who have undergone the ceremony may almost be said to be bound into a fraternity by the possession of these secrets.

[51] In Luiseño, the word "to menstruate the first time," *aci*, is a specific use of the general word which means "to bathe."

[52] DuBois, present series, op. cit., pp. 96, 174.

[52a] *Ibid.*, pp. 77, 176; Sparkman, p. 221.

Although these tricks are usually quite transparent to the outside observer, they form real capital among the medicine-men even at the present day.

The toloache ceremony is undergone but once by each individual. The recurrent rites which are performed at varying periods by all who have undergone the toloache initiation, include those described in the following pages as the War dance or hoRLoi, the awik mourning ceremonies (not to be confused with the Keruk mourning ceremony, which is thought to be the older), and the Eagle dance.

The administration of the jimson-weed extract or kusī is superintended by officials called the kaponaiL, corresponding to the Luiseño paha. Their number is given variously as four, and as a good many—five or six. These men go at night to the house, kwusitcnyawa, where the ceremonial objects are kept. A quantity of jimson-weed root has already been gathered and dried for use in this rite. They break some of this root up, and put it in a small ceremonial mortar, kalmo (pl. 21, fig. 2), which is kept for the purpose. This kalmo is said to have been freshly painted each time in vertical red and black stripes. The red used was the iron rust, or oxide of iron, precipitated by the iron springs of the region. The black seems from the description to have been graphite. This substance is found in places on the desert east of the Diegueño country proper. One man takes the mortar and prepares to pound. Another puts his closed fist to his mouth, tubelike, and makes a long-drawn sound like "u-u-u-u-i-i-i-i." As long as this sound continues, the first man pounds the root in the mortar. As he strikes, the others chant:

tcoki-a! tcoki-a! pound! pound![53]

When the long-drawn sound ceases the pounding stops, and the mortar is passed to one of the other men. Then the first man repeats the sound and the pounding goes on. When the root gets broken up into small pieces they chant:

yoki-a! yoki-a! fine! fine!

When it is almost fine enough for use they chant:

wesi-a wesi-a ready ready

[53] University of California phonograph record 739. Cf. DuBois, op. cit., p. 78, note 12.

Several accounts are given of the way in which the drug was administered. In the vicinity of Mesa Grande they seem to have poured hot water on the powder in the mortar itself. They allowed it to stand for awhile to steep. Then the young boys were brought in and allowed to drink directly from the mortar. One of the kaponaiL slipped his hand under each boy's forehead and pulled his head up when he seemed to have taken enough. One informant at Santa Ysabel[54] told the writer that they boiled the powder in a small jar of pottery, and strained the juice into basketry cups. As cups they used the close-woven basketry caps, npuBL. In the southern part of the Diegueño region they put the powder on a flat basket, sūngūLk, and poured hot water over it, catching the resulting liquid in a large deep basket, xapituL. They then dipped small cups of pottery into the large basket and gave the boys each a drink.

In the meantime a large fire has been built in the dance-circle, himak, and all the people have assembled there. When the boys have each drunk the liquid, the kaponaiL lead them in a group to the dance-circle. When the people see them coming they begin to sing:

kwisi maimoni
maino xaikovera nita

As the boys enter the dance-circle a number of the old men of the village go up and each take charge of a boy. These men are thereafter "sponsors", nyuxut, for such boys. They guide them through the entire ceremony and teach them how to dance.

On this first night, each nyuxut stands behind his protege, as they all stand in a circle around the fire. The men hold the boys under the armpits. Then the kwaipai leads the company in a song, and they march or push the boys around the fire, swaying them from side to side. The song is as follows:

hayompa hayom[55]
hayompa hayom

and is said to mean "look at your son, look at your son". The

[54] Manuel Lachuso.

[55] University of California phonograph record 740(1). Said by a Luiseño, when the record was played for him, to be in the language of the north, San Gabriel, like most his own people's songs connected with the toloache cult.

... effects of the drug, and to have ... The people vary this first chant ... war dance, HORLOI. When one in- ... tells that they sang this song:

... never keep their feet and move about, ... of the dance circle and put some- ... feet. During this sleep or unconscious- ... have a vision or dream which is to ... their future life. This vision often ... about some animal. For instance, ... when as a boy he took the drug, saw ... Grouse said:

I am singing
eastern bird
western bird
grouse
I-am-a-man

... the man took this song for his own. ... "his" bird to the extent that he ... one of the species. The feeling ... the words "totemism" or "fetishism" ... connection with it.[56] After all the ... " helpless from the effects of the ... inside, the grown people continue to ... daybreak.

... after dark, and the subjects do not ... until late the next morning. The first ... morning is to give them large draughts ... their systems of the drug. Otherwise they ... danger of dying. Even grown men have ... the ceremony.[57] Each boy is then given ... They are then painted black from head to ... Some of the men thereupon chew

... account of the Tapakwirp.

... never taken the drug were sometimes initiated.

white clay (soapstone?) and blow the powder over the boys, making them part white.[58] This painting is expected to make them live long, or, as another informant said, to keep the east wind from making them cold after the drugging.[59]

For one day after the administration of the kusī they are allowed no food of any sort. At the close of that period a bowl of sage-seed mush, Spanish "atole," is offered each one. As he puts out his hand to take it, however, the kaponaiL yell, "awi! awi!" (rattlesnake! rattlesnake!) and jerk the bowl away. If the boy is quick enough he grabs a handful or two. Otherwise he gets nothing at all. For six days after the drugging they are given no meat, and but very little mush.[59a]

To ease the pangs of actual starvation during this period, they are given belts, inyip, made of tule. These are about four inches wide and made to tie in front. They are tightened from time to time toward the close of the six-day fast.

The probability is that the boys are extremely ill on the first of these six days. No exertion is required of them, at any rate, until the afternoon of the second day. At that time the boys, together with the kaponaiL, walk to a second and smaller enclosure distant about one hundred yards from the dance-circle. From this enclosure they crawl back in a group to the dance-circle on their hands and knees. The kaponaiL walk beside them, each dragging a long pole. The whole company stop three times on the way for a short period. While in motion they keep up a continual grunting, which sounds like "a-ha-ha-ha, a-ha-ha-ha". This procession is made every day for three days.

At the end of that time the sponsors, nyuxut, take the boys in charge early every night, and teach them to dance. After dancing all night they are led away in the morning by the kaponaiL to a house chosen for the purpose, to be fed a little and

[58] Similarly the Mohave medicine-men blow frothy saliva over their patients.

[59] Manuel Lachuso at Santa Ysabel is the authority for the statement that the painting was done by young women especially chosen for the purpose. If true at Santa Ysabel, it seems not to have been the case elsewhere.

[59a] The corresponding ceremony among the Luiseño has been called mani. This root *mani* means to abstain.

put to sleep. As they leave the dance-circle they always sing the following chant:

kwisi maimoni[60]
maino kaikovira
nizo kwaikora

When they have gone one hundred yards from the dance-circle they stop singing and walk to the chosen house in an irregular crowd.

After the first six days, visitors are expected from each of the neighboring villages to teach them other dances. Such visitors always come in groups, and halt when about one hundred yards from the dance-circle, until one of the kaponaiL goes out and "tells them that all is in readiness". Then they begin grunting "a-ha-ha-ha, a-ha-ha-ha", and approach the circle where the tribe waits in silence. Room is made in the center of the enclosure, and each stranger, taking a boy in charge, teaches him dances and songs until daylight. Each boy in this way learns a number of songs which are different from those sung in his home village. A sort of proprietorship was held and recognized over songs. Certain men know songs which they learned from their fathers, or which other men have "given" them. The people never sing such songs unless the "owner" is present to lead them. This giving away of songs may account for the fact that the Diegueño sing a great many Luiseño songs, since there has been, first and last, a good deal of intercourse between the two peoples.

After the first three days the boys are painted with broad stripes of white powdered soapstone. These stripes cross on the breast, pass over each shoulder, and meet on the back. Pl. 26, fig. 2, representing a man prepared for the Whirligig dance or Tapakwirp, shows the general appearance of this white paint. One side of the face in the case of the boys is painted white, the other red. The feet during about the first week are striped transversely in black and white; after the first week, in black and red.

The food given is gradually increased in quantity from day

[60] University of California phonograph record 740(2). Compare the song given on page 295.

to day after the first three days. It consists exclusively, however, of unsalted acorn or sage-seed mush. At the end of a month the initiates are taken to some creek about a mile away from the village. Here the head of each candidate is carefully freed of lice.[61] The tule hunger-belts are then removed, sunk in the creek, and weighted down with rocks. In the course of time a certain bush, ipewi, it is said, grows up out of these belts, in the water. Under ordinary circumstances this bush grows, it is thought, only on the tops of high mountains away from the water.

After the burying of the belts, all the party, men and boys, join in a footrace, mutpikwiL, to the dance-circle. The first to arrive is held to be a "high-bred man", and if it chances to be a boy, his relatives throw baskets and the like in the air for other people to pick up. This does not often occur, however. Men hide in the bushes and grass along the race-course, and as the straining youths pass by in the race, these fresh men join in and easily beat them. They do this "for a joke". If a boy runs good and fast on this occasion, he will always be fleet of foot.

The first half of each night during the following month is spent in dancing. The boys are given all the acorn mush they can eat. The purpose of the fasting which precedes is to accustom them to get along in after life on little food. Toward the end of the period the boys are each given by his sponsor a plume of owl or crow feathers, and in addition to that a painted stick to carry in the dances. This stick is flat, pointed at one end, and sometimes inlaid with abalone shell. It is similar to the "hechicero" stick, kotat, Luiseño paviut, carried by the old dancers, but has no "medicine-stone" or flint fastened in the end. Figs. 1 and 2 show such hechicero sticks. This stick is sometimes decorated with yellowhammer feathers and eagle down. The following song is sung by the women when the boys are given the feather plumes and painted sticks:

nerosvita
nikwam mimaino
miyip notomyara

[61] See above, in the Introduction.

At the close of this period a sacred painting of the world is made on the ground.

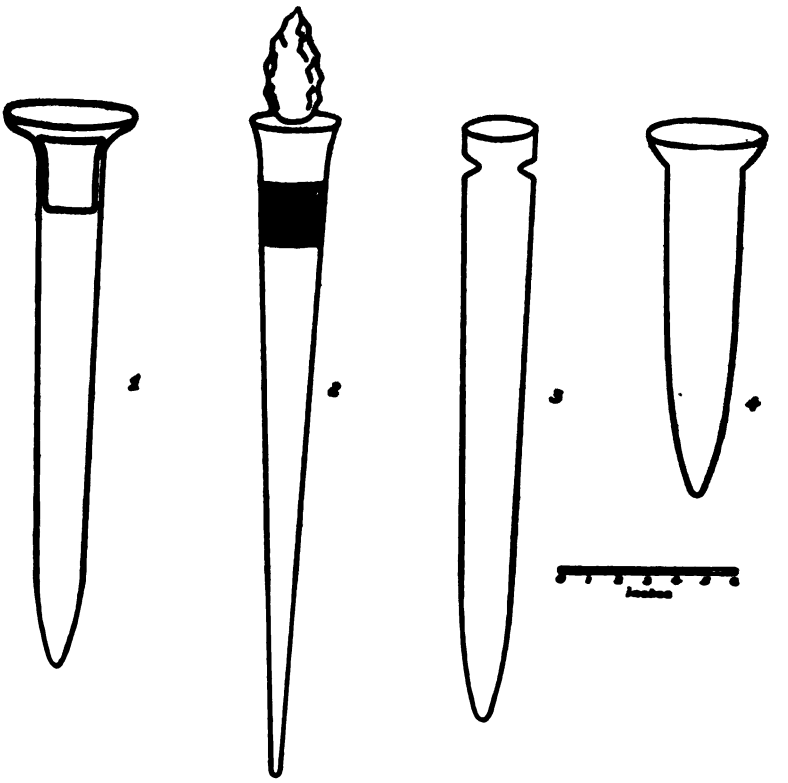


Figure 1.—Four ceremonial wands in possession of Mr. E. H. Davis. Nos. 1, 2, from a cave in the desert. Painted red. Inlay lost from No. 1. No. 3, Diegueño from Mesa Grande. No. 4, Luiseño from La Jolla.

THE GROUND-PAINTING.

Several variations in this ground-painting have come to light in the Diegueño country, but all such are of one general type. All alike are quite different from anything reported among the Luiseño.[42] The painting (pl. 24, 25), which is some fifteen or eighteen feet in diameter, is a map or diagram of the world as known to the Diegueño. It is said to have been made inside of the kwasitcayawa, or house where the ceremonial

[42] DuBois, op. cit., pp. 57, 179.

objects were preserved. In form it is a circle, representing the visible limits of the earth—in other words, the horizon. This circle marks the place where the sky, amai, touches, or seems to touch, the ground. The circle is, therefore, itself called amai. It is made in white powdered soapstone. The name and meaning of this circle are identical wherever the Diegueño were questioned.[63]

Across the circle stretches a broad white line from east to west, also made in white powder. This represents the Milky Way, called amai xatatkuRL, sky-its-backbone. This feature is also constant wherever the painting was described to the writer.

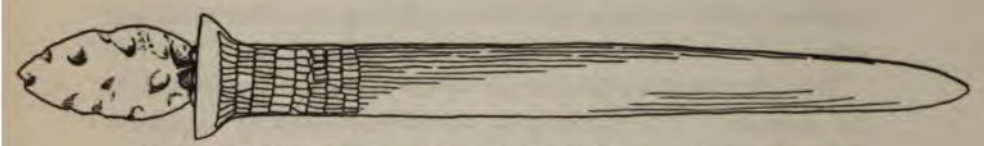


Figure 2.—Ceremonial wand from Mesa Grande. Length 23 inches. Peabody Museum of Archaeology and Ethnology, No. 4-66454.

The other heavenly bodies are indicated here and there *within* the circle, since they are all situated centrally to the visible horizon. The sun, inyau, and the full moon, xaLya, are represented as disks. They are made in the red oxide of iron from the mineral springs. The sun is considered to "make" the large circle, amai, and is therefore drawn near the circumference. Its precise location with reference to other objects in the circle seems to have varied among different villages. The full moon was placed in the center, near the Milky Way. The new moon, xaLya-xai, is drawn in the northern half of the great circle, near the eastern end of the Milky Way. The last quarter, xaLya-inyo, is drawn in the southern half of the circle, on the other side of the Milky Way and opposite to the first quarter. The first and last quarters are represented as crescents, one of them reversed. Like the sun, the moons and all the other heavenly bodies are made in red oxide of iron.

[63] At Mesa Grande, Santa Ysabel, Capitan Grande, Los Conejos, Inyaxa, and Campo.

All the constellations recognized by the Diegueño were represented in the painting. Those mentioned to the writer were xatca, the Pleiades; amu, Mountain Sheep;[64] sair, Buzzard;[65] and watun, Shooting.[66] Each star of these constellations was represented as a small disk of iron rust. The following scheme was followed in the orientation of these constellations in the painting: Xatca and amu, the Pleiades and Mountain Sheep, are said to accompany each other in the heavens.[67] The Pleiades are drawn, as they appear in the heavens, in the southern half of the great circle, near the eastern end of the Milky Way. Amu is drawn just east of xatca. Similarly, watun (Scorpio?) points always directly at sair (Altair?). These two constellations are drawn together in the northern half of the painting, opposite xatca and amu.

The principal mountains on earth are also represented in the painting. The painting is all in one plane by necessity. These mountains therefore appear scattered in among the stars as the sacred diagram is actually made on the ground. The identity of these mountains seems to vary for the different villages which at various times have made the painting. That is, the local topography around each village was reflected in the painting. At Santa Ysabel they drew Mount San Jacinto, the islands of Santa Catalina and San Clemente, which are considered to be mountains out on the ocean, and a mountain called nyapuxaua,[68] whose location is vaguely indicated as southward on the desert. Santa Catalina they must have learned about from the Luiseño

[64] In Mojave, amo, mountain sheep, is the three stars of Orion.

[65] Cf. Luiseño: Yungavish, buzzard, the star Altair. DuBois, p. 162.

[66] Cf. *ibid.*, 165, note 304: "It is said that with the Dieguefios Scorpio is a boy with bow and arrows." "Orion is called Mu in Manzanita Diegueño, Emu at Mesa Grande." The present writer's information among the Diegueño seemed to make watun the three large stars of Orion, but the Mohave and Luiseño parallels and Miss DuBois' statements make it appear probable that amu is Orion and watun Scorpio.

[67] *Ibid.*, 163: "Hulaish is Orion and Chehaiyam the Pleiades. These two are always named together."

[68] This mountain is said to be half dark-colored earth and half light-colored. It is related that when mankind were first created, the Mexicans, pinyai, were made of earth from the light-colored side, the Indians from that of the dark-colored side.

at Agua Caliente, who lived almost in the same valley as themselves, and with whom intercourse was easy. The people at Mesa Grande also drew four mountains. These were San Bernardino, represented in the northern part of the circle, and the three Cuyamaca peaks in the southern part. San Bernardino is easily identified, since it is called "white-top." It is the only mountain in southern California with a snow cap. The Cuyamacas are plainly visible to the south from the vicinity of Mesa Grande. At Los Conejos rancheria the people seem to have represented six mountains,[69] which could not be identified by the present writer in terms of the modern geography of the region. One of them, however, called moon-rock mountain, wixaʟya, because of a crescent-shaped crag near its summit, was pointed out at a distance of twelve or fourteen miles from the reservation. No rivers or lakes were represented in the ground-painting, since there are none in the Diegueño country.

All the creatures associated with the awik cult are represented in the painting. These correspond to the "Chungichnish animals" of the Luiseño. They are Coyote, Wolf, Bear, Black Spider (Tarantula), and Raven. Such animals as the skunk, wildcat, and raccoon, and such birds as the crane and owl were never drawn. The awik creatures are represented each by a conventional symbol consisting of a line bent at a right angle. In addition to these creatures, several species of snake are drawn. The most important in significance are the two varieties of rattlesnake, the light-colored and the dark-colored, awi niʟ and awi axwat. Mention is also made, in the description of the painting, of the gopher-snake, awiyuk, grass-snake or blue garter, xawitai, and red racer, xiʟkair. These snakes were drawn as sinuous lines, made in different colored seeds. The rattlesnake is considered to be beyond all others the medium through which falls punishment for ceremonial offenses. The two rattlesnakes, said to correspond to two actual varieties found in the region, are accordingly drawn with particular attention to detail. They are very large, said by some to reach clear across the painting. The "diamond-back" pattern is put in with the

[69] Called awai, huʟkokwis, xamatai, hipokwiskwi, wixaʟya, and wiki'-naũn.

utmost care. The eyes are represented by pieces of haliotis shell.

The toloache mortars, kalmo, which each village possesses are set inside of the painting in a row near the eastern edge. Each mortar has its pestle, xanokai, inside it. The rattlesnakes are so arranged that their heads just touch the mortars. The boys are instructed that mankind is typified by these mortars. The great snakes are drawn with the heads just touching them to indicate that when people are careless, the snake is always waiting to destroy them.

According to some accounts, a small excavation three or four inches in diameter, is made in the sand-painting. The boys are made to stand over this hole, one by one, and spit into it. If they miss, it is a sign that they will not live long. In some villages lumps of sage-seed and salt are placed in the boys' mouths, in order to induce a flow of saliva. When the significance of the different figures has been explained, and after the spitting is done, in case that feature is present, the dirt is shoved in over the painting, obliterating it, so that no one else may see it.

CONCLUSION OF THE BOYS' CEREMONY.

On the following day, late in the afternoon, they proceed with the final rite of the ceremony. While the other rites have been progressing, a figure representing a man has been fashioned out of netting made of nettle fibre, aboni. This figure, minyu, is five or six feet long. It seems to correspond exactly with the Luiseño "wanal wanawut."[79] The Diegueño figure, besides having arms and legs, is represented as having a long tail. A pit is dug, large enough to accommodate the figure when stretched out at full length, and from eighteen inches to three feet deep. The long axis of this pit points east and west. The eastern end is made sloping. The netting figure, minyu, is pinned in the bottom of this pit, feet to the east. Small flat stones, reserved for this purpose, are pinned on the figure at the end of the tail, on the abdomen, on the base of the neck,

[79] Pulliam, p. 35.

which is very long, and on the head. The people, especially the relatives of the initiates, then gather around the pit. One by one the boys are placed in the pit, their feet resting on the first stone. Each boy's sponsor stands behind him and takes him under the armpits. According to one account, the boy also steadies himself by placing his hands on the sides of the pit. The kwaipai, when all is ready, pronounces "mwau." The people give three answering grunts, and at the third the boy jumps on to the next stone. At another grunt he jumps to the next, and so on. Should he miss landing fairly on one of the stones, his relatives all begin to wail, in the belief that he will die before long. When each candidate has passed through the pit in this way, they all gather about, each with his sponsor beside him. Some old man then takes out the flat stones, since they are preserved with the other ceremonial objects in the kwusitcnyawa. At a signal from the kwaipai, the whole company then "grunt" three times. At the third, the boys and their sponsors push the dirt in from all sides, filling the trench and burying the netting figure. If any of the dust rises from this "grave" and gets in a boy's nostrils, he will die.[71] As it is almost dark by this time, they begin the war dance at once, on top of the grave where the figure is buried. They dance all night, and at daybreak dance the fire out.[72] This ends the ceremony.

MOURNING CEREMONIES.

Quite as significant as the adolescence ceremonies are the mourning rites. Mourning for a relative usually lasts among the Diegueño for one year. The hair of both men and women was formerly cut short during this period, and the face sometimes painted black. Cremation was universally practiced by the Diegueño until they came under the influence of the missions. As far as can be learned, each body was burned without any rites other than the one mentioned above,[73] the purpose of

[71] Cf. the Chaup Myth by Miss DuBois, Journ. Am. Folk-Lore, XIX, 163, 1906.

[72] See the account of the Fire ceremony.

[73] See page 279.

which was to make the spirit done with it.[74] The clothing and other property was laid aside for use in the Mourning ceremony. Whatever ashes remained after the cremation were gathered up and placed in a small-mouthed jar of pottery, of the type used for carrying water on the desert (pl. 40).[75] This jar was then put away in some hidden place among the rocks, or buried on a hillside.

The funerary or mourning ceremony occurs on the anniversary of the death. At this time the clothing and personal property of the deceased person is publicly burned amid appropriate ceremonies. This burning is made the occasion of a large gathering. As usual in California, the family who gives the ceremony is at the total expense of entertaining all the visitors, and in addition to this, considerable property in the form of baskets, of late replaced in large degree by money and calico, is given away and burned on the funerary fire. If difficulty is experienced by the family in getting together sufficient property, the festival may be postponed for two and even three years.

THE CLOTHES-BURNING CEREMONY.

At the appointed time word is sent to the neighboring villages and families, and a large assembly drawn together. According to invariable custom, both for this and kindred ceremonies, the head of the family passes over the management of everything to a friend or visitor. Both he and his family carefully refrain from even tasting any of the food gathered for the festival.

The first night is passed by the relatives of the deceased in wailing. On the following night a great fire is built and all the people, men and women, dance around it, circling alternately in each direction. The man who has charge of proceedings, assisted by one or two others, carries the dead person's clothes. The songs sung at this time are the regular songs of the Fire dance.[76] At the close of each song all the dancers together make

[74] This is performed also in the Eagle ceremony, the account of which see below.

[75] Cf. C. G. DuBois, "Diegueño Mortuary Ollas," Am. Anthr., n. s. IX, 484, 1907, pl. 29.

[76] The account of which see below.

the deep grunting sound: "mwau——u," and motion upward in the air. At the completion of three or four songs, all pause and face toward the fire, repeating the grunting sound three times. Then the sound is repeated once more, and all the clothes are thrown at the same time on the fire. While the garments, together with numerous baskets and other property, burn, they sing this song:

menai dispa tcawai tcawi	now dead I-begin-to-sing[77]
menai dispa tcawai tcawi	now dead I-begin-to-sing
xitoL kawak enyak awik	North, South, East, West
amai amut	up, down

Following this they dance several times around the fire, singing Fire songs, then throw on more clothes and sing:

mawi-a!	mawi-a!	what-for?	ah!	what-for?	ah!
moyo-o!	mawi-a!	you-dead,	oh!	what-for?	ah!

Anyone of the strangers who wants a little money takes a long stick and turns over the clothes so they will burn better. The relatives of the dead person then come around and give him small jars, baskets, and other "little things."

When the clothes are completely burned they sing as follows:

apamsi penoxi inyoxo

The rites are completed by dancing the fire out, singing meanwhile the songs which belong to that ceremony.[78]

THE FEATHER CEREMONY.

A distinctive mortuary ceremony is performed after the death of each toloache initiate. Among the Diegueño it is called "oteam", and seems to coincide with the unish matakish ceremony of the Luiseño.[79] It is said by the Diegueño to take place

[77] Part of the myth which tells of the origin of the ceremony is as follows: "The first man who performed the ceremony reached his hand to the North and brought a red rock, from the East a gleaming white rock, from the South a green rock, and from the West a black rock because the sun sets there. Then he blew in all four directions and sang, 'My father and grandfather are dead, so now I sing.'" The remainder of the narrative concerning the origin of the ceremony could not be obtained.

[78] See below, the account of the Fire ceremony. The Luiseño Clothes-Burning is described in present series, VIII, 180, 226.

[79] DuBois, p. 92.

on the afternoon preceding the Clothes-Burning ceremony just discussed. Some time about the middle of the afternoon one of the old men swings the bull-roarer, air, three times. This is the signal for the people to assemble. Some especially practiced man then performs the Whirling dance. This corresponds to the Luiseño Morahash dance,[80] called at the present time the "Tatahuila." It includes a great deal of whirling, and a man who is not used to it becomes dizzy and falls down. This dance has been observed a number of times by the writer. It is also performed in connection with another mourning ceremony known as the Eagle dance.

THE WHIRLING DANCE, TAPAKWIRP.

Before the dancer appeared, on the occasions when the dance was witnessed, one of the old men made an energetic speech, saying that the ceremony was ancient, and must be done exactly according to usage. The dancer remained out of sight in a brush house or "ramada" until this lecture was completed. When all was in readiness and the crowd waiting, an assistant who was with the dancer raised a long cry, sounding like "kūūūwa^{a}h!" All the old men around the himak or dance-circle grunted and stamped with the right foot. The assistant then repeated his cry, and all stamped again. On a third repetition of the cry, all grunted and stamped three times. Then the assistant, exclaiming "a-ha-ha-ha a-ha-ha-ha," ran out of the house, and entering the dance-ground from the north side,[81] ran half way around its circumference. Then he halted and dropped on one knee, facing the sun. He carried a stick in each hand. These he held up toward the sun as if to protect himself from a blow (pl. 27, fig. 1). After a momentary pause

[80] *Ibid.*, p. 185. Etymologically, the word is compounded of the root *mor*, to whirl, plus a connecting vowel *a* which indicates that the root is to be taken in a passive or middle sense, plus a suffix *hash* which means "the doing something for someone else." The Luiseño name implies, therefore, *the whirling that is performed in behalf of someone else.* This is particularly in harmony with what has been elsewhere written concerning the Tatahuila.

[81] East is the ceremonial direction among the Diegueño. This detail may indicate a Luiseño origin for this rite.

the dancer also appeared on a run, entered the dance-ground from the north, encircled it once in a clockwise direction, and halted at the point of entry. He also carried two short, smooth sticks (pl. 26, fig. 3). When he halted he touched these two sticks to the ground and leaned upon them (pl. 27, fig. 2). The costume as shown in this figure consisted of a skirt or kilt of long eagle-feathers, yipexai, mounted on milkweed-fibre network.[82] In connection with this was worn a head-band of split owl-feathers, tsekwirp (pl. 22, fig. 4), mounted on a circlet of mescal or other fibre. His body was painted (pl. 26, fig. 3, pl. 27, fig. 3) in broad stripes of white paint. This is made of powdered soapstone mixed with water. This costume seems to be the ancient ceremonial dress of the Diegueño and their neighbors, the Luiseño, since Boscana, writing in the early years of Spanish influence, describes practically the same dress.[82a]

An old man with a rattle took his stand close by the dancer, and the two conversed in a very low tone. This was always done whenever the dance was observed, though the words were in so low a tone that they could not be distinguished. They are thought by the younger people to have ceremonial significance, though the present writer was never able to discover precisely what is said at the time.

After a moment the old man began to shake his rattle and sing. The dancer trotted around the circle once or twice, and then began to whirl as he went. The song was as follows:

niyaukam penowo	I-handle . . .[83]
pawaiyom temetpon	feather-skirt sun
nipaLon	my-rattle

The dancer signalled for faster music by rapidly striking together the two sticks he carried. After some time he struck these sticks together once, and as the song ended he made a short leap, landing on both feet. Then to this accompaniment of a deep grunt from the old men looking on, he bent his knees slightly, pointing the stick in his right hand toward the ground.

[82] For this type of skirt, see DuBois, op. cit., plate 18.

[82a] Boscana, "Chinigchinich," in Robinson's "Life in California," New York, Wiley and Putnam, 1846.

[83] The words of this and the following song are Shoshonean.

Then he trotted silently around the circle to its northern edge, and leaning over rested on his two sticks.

The next song was as follows:

neyonga nitsoyo	my-head my-. . .
pa-a-awaiyum	eagle-feather-skirt

The dancer trotted around the circle as at first, but soon began to skip instead. Finally he began to turn as he skipped, hopping or skipping on one foot between every half-turn. At times he changed his step in the midst of a song from the plain turn to the skipping turn. He also paused for an instant at frequent intervals to squat three times (pl. 27, fig. 4), facing in a different direction each time. Three or four songs always completed the dance, and the performer then ran back whence he came.

Other Tatahuila or Tapakwirp songs are the following. They are sung with no apparent regard to order.

itca yumitci itca yumitci[84]
yumpeni yumno yumpeni yumptero
hai-i-i-wano
aweni maitero
wainipai *ro*rowi nani
neyongi aweni mainipa
*ro*rowi neyongi
itca, etc.

no*r*owi mumpeno
ke*r*uwi mumpeno
kemipa mumpeno
kepai novita
ke*r*uwi, etc.

pohyom nipa pohyom nipa[85]
nipampowow nipampo *ro*rowi
witcaxa wipneyau
tse*G*o*r*a tsaxawi
penomo apa
*ro*rowi mohitna
penema *ro*rowi, etc.

sahavi penovi[86]
xeho*r*a mokikai
penovi meyoivi

[84] This and the two following are said to be in the Cahuilla language.

[85] University of California phonograph record 689(4).

[86] *Ibid.*, 689(2).

CONCLUSION OF THE FEATHER CEREMONY.

While the Tapakwirp is in progress, the old dancers gather in a second enclosure at some distance from the assemblage. After the conclusion of the dance they appear one by one and come part of the way to the dance-circle. Each one imitates as far as he can the actions and manner of the dead man. Amid great wailing and crying on the part of the spectators he then returns to the small inclosure. After all have done this, the entire company of dancers appear, crawling on their hands and knees. As they crawl they make animal noises. Each one is painted with the footprint of the animal about which he dreamed when he took the toloache. Every man imitates as far as he can the sound which his particular animal is in the habit of making. Continuing this crawling posture, the dancers advance to the dance-circle and seat themselves about its edge. When they are seated the dead person's headplume, talo, is set upright in the center. At a signal the company then move their hands together with a solemn gesture to the left, and then to the right, each time with a long-drawn grunting sound. Then they toss their hands upward twice with an expulsion of the breath each time, finishing with two quick gestures and two expulsions of the breath.

This ceremony, called the otcam, is intended to keep the dead person from coming back; or, as one informant put it, "to make him done with this world."[87] The dead person's plume is then buried in the center of the circle, the company grunting three times, and at the third time shoving in the dirt from all sides.

THE IMAGE-BURNING.

When several members of a family have died within a short period, it is customary to hold a ceremony called Image Burning or Keruk, southern dialect Wukeruk. The corresponding cere-

[87] The Luiseño term *unish matakish* (DuBois, op. cit., p. 92) applied to a corresponding ceremony has a similar meaning. Unish is not recognized at the present time. Matakish or matakihish is a verbal noun from the causative stem of mati, "send away". The meaning of the term is "the causing to send one thing away"; "to loosen or untie it".

mony among the Luiseño is called Tochinish or Tauchanish.[87a] Images representing each of the deceased are made out of matting. These are stuffed with grass to give them a lifelike appearance, and are dressed in all sorts of finery. Eyes, nose, ears, and teeth are represented with bits of haliotis shell. The gum of the greasewood is used for glue. Drops of this substance are also used to make the pupils of the eyes. Human hair is put on the heads of the images. These images, together with considerable property, are burned amid elaborate rites. The whole forms a long and complicated ceremony.

Mention of this ceremony is made several times in the mythology of the Diegueño.[88] Its origin is described in the Creation myth which follows in this paper. It is believed by the Diegueño to be the first ceremony ever performed. The author of the account of the equivalent Luiseño ceremony says correctly that the original source of the ceremony must remain a matter of speculation.

Though in the account given of the Luiseño ceremony no mention is made of time, it seems likely that the rite itself consumes only two or three days. The Diegueño ceremony, however, requires six days. For the latter a small ceremonial house is built. This house, keruk, is absent from the Luiseño ceremony. It seems, therefore, that the Diegueño have a fuller form of the rite. Since, in addition, the ceremony is mentioned in Diegueño mythology, while it is nowhere mentioned in Luiseño mythology as so far printed, it at least seems likely that the ceremony was first celebrated by the Diegueño and acquired from them by the Luiseño.

As always, the family giving the ceremony entertains all the visitors. It was formerly a matter of pride to furnish not only an abundance of food, but also to provide delicacies. For this reason a quantity of pine-nuts, axiw, choke-cherries, akwai, and mesquite beans, anal, was gathered, and sometimes brought from a distance. The images are made in some private place by the relatives of the deceased persons. On the spot chosen

[87a] DuBois, op. cit., pp. 100, 103, 180; Sparkman, p. 227.

[88] Journ. Am. Folk-Lore, XIX, 153, 160, 1906.

for the ceremony the small ceremonial house called keruk is erected. It is in shape half a hemisphere facing the east.[89] When all is in readiness the people assemble and pass one night in wailing. In the morning they have something to eat, and go to sleep. The relatives of the dead fast as much as they can and carefully refrain, moreover, from touching any of the festival supplies.

The next night a large fire is built near the keruk. The faces of the images are then painted. Those which represent women are painted red with scorched mescal syrup. Those which represent men are painted black with graphite, with the addition of a white stripe down the nose and chin. Amid great wailing the images are then picked up and carried to the fire. The relatives join in the procession, but do not carry the images. They continually wail. The following song is sung as they march.

wumi pawakaam	weeping we-arrive
wumi maiyeuwinyaka am	weeping we-come

When they reach the fire the people march around it from left to right. They advance first one foot and then the other with the twisting motion of the body already mentioned. The sound of the elderbark skirts worn by the women at the time is supposed to be represented by the following song:

xeyuL paxaL apuraxa apuraki	put-on elderbark-skirt
apuraxa xatca tcapuk	. . . Pleiades (he)-comes-forth
amai payiw	up-in-sky (he)-finishes

A long series of songs follows, and the dancing continues all night. So the time passes for six days, with eating and sleeping in the daytime, and dancing at night. Several times every night the relatives of the deceased persons pile baskets and clothing on the fire and burn them. Small baskets are also thrown in the air. These the visitors gather up and keep for themselves. This is always accompanied by wailing on the part of the family giving the ceremony. On the seventh night, after dancing till sunrise, they put the images inside of the keruk. Then they put in a great quantity of property, clothing, baskets, beads, and household goods. Finally the remaining space is

[89] East is the ceremonial direction among the Diegueño, as north is among the Luiseño.

filled with dry brush and the whole set on fire. While the smoke and sparks shoot upward in the early morning sunlight, they sing the following song:

wa katomi aminy awa is-going essence to-your home
wa katomi aminy awa is-going essence to-your home

The significance of this song as showing the existence of a belief in a future life has already been discussed. The singers were thoroughly questioned concerning this belief, but no further particulars were brought out. No distinction seems to be made in this future state between "good" and "bad" people, nor between those who observe the ceremonies and those who do not. Concerning the general purpose of the ceremony, the usual explanation was that offered for the Clothes Burning—that people did not wish to see any reminders of the dead left about, because it made them feel bad. This of course does not explain the custom of burning new and valuable property which has no association with the dead. On a second visit to the region the writer was informed that the ceremony was to make the dead contented, "so they would not come back." After this ceremony the dead are never mentioned, and signs of grief are discontinued.

THE EAGLE CEREMONY.

The Eagle dance or ceremony, expa ima, is a mourning ceremony held on the anniversary of the death of a kwaipai, or leader of the dances.[90]

An Eagle dance which was observed by the writer at Mesa Grande, occurred at the end of a three-day festival. During each of the first two days the people in holiday attire loitered about the fiesta grounds, busying themselves in a general way with the usual "fiesta" events. A peon gambling game[90a] was running during most of the time; and in the afternoons and

[90] Luiseño accounts in the present series, VIII, pp. 7, 113, 114, 182, 227; Am. Anthr., n. s. VII, 625, 1905. An early reference is in the present series, VIII, 1-27, 1908, A. L. Kroeber, "A Mission Record of the California Indians," in which see p. 4.

[90a] See below.

evenings there was considerable gambling with poker and chuck-a-luck. Every afternoon, however, a Whirling or Tapakwirp dance was held, and after nightfall, a War dance or HORLOI. In a cage under a brush shelter or "ramada" off to one side, there was kept a large bald-eagle. Some months before he had been purchased in readiness for this ceremony from the people to the southward. This had been in accordance with well established usage. If a village used an eagle from a nest near by, it would be hard, it was thought, to make the spirit leave his body when he was killed. It would have an attachment for its old home and would therefore linger about.

Each afternoon before the Tapakwirp or Tatahuila dance, the daughter of the old leader or kwaipai wailed for some time. This was the only indication that a mourning ceremony was in progress.

On the third evening, toward nightfall, an extra large fire was kindled, and for two or three hours the old men danced the HORLOI. The final part of the dance was, however, omitted. The dance-circle was then cleared, and one of the oldest men announced: "All will sit down and smoke tobacco." After some time an old man, said to be called the KAPONAIL,[91] who sat on a stool to one side, exclaimed "mwau." Several others then went to the middle of the dance-circle and motioned upward three times, grunting as they did so. Then a so-called "capitan" made a long and very emphatic harangue. He said that the ceremony they were about to perform was very ancient. He explained that it had not been held for a long time, but that they were going to perform it just as had always been done. The kwaipai had died, he proceeded, and the old men had determined to get together clothes and property and send it to him, and to kill the eagle and send it with messages of respect to him. The eagle, he explained, in this ceremony, though he appeared to be a bird, was really a man. He was not to be killed by ordinary means, but would be "witched to death" by the dancers. Nobody therefore was to move about or make a noise, but all were to remain quiet and see this wonder. It was

[91] Cf. preceding, p. 294.

extremely hard to kill the eagle in this way, and the dancers could do it only because they had a great deal of "power."

Soon after the close of this speech the oldest one of the dancers began singing and sounding his rattle off in the darkness beyond the light of the fire. Soon he appeared in the dance-circle at the head of a line of old men. One of these carried the eagle. The other people of the rancheria fell in line behind them and all marched around the fire, twisting from side to side. As the eagle was carried into the circle, the daughter of the deceased kwaipai wailed and threw some new calico over him. The song was as follows:

otolyi wam	flapping he-is-gone[92]
emilyi wam	on-his-feet he-is-gone
inya-capa-a	my eagle
inya-capa	my eagle[93]

After this song had been repeated a number of times, there was a ceremonial pause or rest, during which the eagle was passed to another old man.[93a] During these pauses there was a general wailing. The dancing continued in this way without change until seven songs in all had been sung. They were obtained as phonograph records on the day following the ceremony, the order being established by notes and texts taken down at the time of singing. Although the arrangement was afterwards learned to be fortuitous,[94] the reader can see that these songs seem to outline a myth or story.

wumi wam	crying he-is-gone[95]
icpa kukonyiL	eagle black
expa kunumsup eweL hakwimp	*Said to mean:* White Eagle puts his nest on big cliffs. Eagle from the West puts his nest on sycamore trees along the edge of creeks.[96]

[92] Said of a bird hopping along on the ground before he launches himself into the air.

[93] University of California phonograph record 707(2).

[93a] These brief but frequent intermissions are characteristic of all Dieguefio ceremonies.

[94] The leader explained that he had not heard the songs for years, and sung them just as he could remember them.

[95] University of California phonograph record 711(1).

[96] *Ibid.*, 712(2).

wumi amai yiwama	crying up-in-the-air he-is[97]
kwonyūwai mayiwa	(the)-nest there-it-is[98]
expa apakwaL	eagel chicken-hawk
amu tcapuk xatca tcapuk	Orion(?) coming-out Pleiades coming-out[99]
wiu amai inyau purkak	now up-in-sky sun (he)-finishes
expa lamalama kiwiw!	eagle is-a-man, look![100]

In the pauses between several of these songs, one man held the eagle aloft while another took his stand some distance away and pointed a small stick at the bird. He aimed this stick as a man aims a rifle, twisting it over and over, however, with his thumb and forefinger. At the the same time he exclaimed "ahahaha! ahahaha!" Some of the dancers dipped the end of the stick in the fire before they pointed it at the eagle. In this way death is supposed to be conveyed through the stick. Following this action a second man always approached the eagle and waved his feather tuft in front of it. Then he brushed or "dusted" its head three times[101] with the plume. At the same time they blew or made a laughing sound. Several of the old men at various times blew tobacco smoke over the bird. All this was done "to brush away death, so they could tell him more."[101a]

At the conclusion of the last song above, several people, relatives of the dead kwaipai, approached the eagle and threw new calico over it, wailing at the same time. The most muscular one of the old men then took the eagle, and held it aloft at arm's length. Another dancer took a position across the dance-circle. Raising his stick this second man pointed it slowly and impressively at the eagle. After a pause, he broke into a sudden shout, "ahahaha!" and made his stick quiver. At the same moment the man who was holding the eagle pressed his finger in over its heart and killed it. The muscular exertion required showed in the trembling of his arms as he made the effort. The attention

[97] *Ibid.*, 713(1). The song refers to the young eaglets in the nest.

[98] *Ibid.*, 713(2). The song is to explain that "Eagle and Chickenhawk once were friends".

[99] *Ibid.*, 709(1).

[100] *Ibid.*, 712(1).

[101] One man did it four times instead of three.

[101a] More messages for the deceased kwapai?

of the onlookers had of course been attracted to the other man by his peculiar actions and his sudden shout. The real cause of the eagle's death seemed not to be understood by the onlookers.

As the eagle sank forward dead, many of the company wailed. Someone threw another piece of calico several yards long over the bird. The daughter of the old leader in whose honor the ceremony was made scattered considerable money in small change among the crowd. This was gathered up by anybody who wanted it.

Soon the old man who directed the ceremony began to sound his rattle again. The singing and dancing continued far into the night. The old men took turns carrying the dead eagle around the fire. The songs were as follows:

awir amanha	wings he-flies[102]
axa inyau wiayau kiwiw	water I am-beating look![103]
axa wakum wakumu	water rolls rolls[104]
mixa-i wakumu	your-water rolls
axa kaiakwiru-u	water its-edge[105]
mixa kaiakwiru	water-of-ocean its-edge
expa ruara kiwiw	eagle is-swooping look[106]
expa manamana kiwiw	eagle is-flying look
kwinyora kwinyora	colored colored[107]
axwata kwinyora	red colored
inya expa	my eagle
waiyu iL waiyu	coming black (-eagle) coming[108]
wam iL wam	going black (-eagle) going
ik-apa namcap	eagle white
wam-i wam	going going
axawi ik-aspa	to-water eagle
inya iL waiyu	my black (-eagle) is coming
iũ nya axa	eye my water[109]
mipawoka	it-is-flowing

[102] University of California phonograph record 703.

[103] *Ibid.*, 705(2). The waves say this to the eagle.

[104] *Ibid.*, 706(1).

[105] University of California phonograph record 706(2). The eagle says this as he walks in the edge of the surf.

[106] *Ibid.*, 706(2).

[107] *Ibid.*, 707(1).

[108] *Ibid.*, 708(1).

[109] *Ibid.*, 708(2). Sung as they wept for the eagle.

An important part of the ceremony remained yet to be performed. That was the burying of the eagle. This was not done, through some misunderstanding, until the following morning. The grave for the eagle was dug by one of the old men in the center of the dance-circle. Its long axis was north and south. No songs or ceremonies of any kind accompanied the digging. The dead eagle, wrapped tightly in a new piece of red calico, was laid on the west side of the grave. After the first part of the ceremony had been completed, and before the eagle was thus brought out for the burial, the longest feathers had been ceremonially plucked, in order to make a dance-skirt. This had been done by the old men in a private place. During the operation no word was spoken, in order "not to bring bad luck."

The leader took his place, kneeling, on the west side of the grave and facing it. Four other old men knelt about, completing the circle. The leader then took the eagle in his hands and waved it three times in a circle, saying each time "wu—o." The other men grunted deeply after each circling motion. The leader then raised it aloft three times, while the others grunted again each time. Finally he waved it first to the left and then to the right, while the others grunted each time as before. Then he began to pat the bird with both hands together, while the others imitated his movements with their own hands, but did not touch the eagle directly. As this patting progressed, the men chanted in a curious choppy monotone:

wesi wesi	done done
ki-i kiya	
papyau wesi	. . . done
kiyi kiyi	

At the end of three repetitions of this song, they all expelled their breath very forcibly three times. The whole was then repeated three times. Then the leader exclaimed "tea," and all said together, in deep gutteral tones, "hi u hi," or something to which these sounds are an approximation. The eagle was then put in the hole and the dirt pushed in from all sides. Another piece of red calico was thrown in the air by the daughter of the dead leader.

The old man who had led the singing then pressed the mound of earth three times with his hands, saying "Once I put it, twice I put it, three times I put it." All grunted once at each phrase. Then all stood up and began pressing the grave with their feet. This movement gradually assumed the form of a march around the grave, circling from right to left. The women had in the meantime gathered on the west of the dance-circle, and as the old men marched both men and women chanted.

toki toki
aso aso

Their utterance in this song was very abrupt, sounding like "to!ki!to!ki!a!so!a!so!" When this had been repeated three times, the old men motioned away into the air with a grunt. Throughout this song the man who led in the singing made a steady long roll with his rattle.

At the end of the song there was a short pause. Then the dancers turned sideways to face the grave, and stepped sideways to the right. The song, in which both men and women took part, was as follows:

mero romki
hiyau tcaau
alwe potaxau

This was repeated three times, then three grunts and stamps were given by all the dancers. After the song the dancers broke up and transferred their interest to a peon game which was then progressing. The Eagle dance was over.

THE "WAR" DANCE.

The writer observed the HORLOI or "War dance" a number of times in the fall of 1907. It always occurred after nightfall. A large fire was kindled in the evening on the northern side of the dance-circle and soon after sundown a number of women seated themselves in a group near it. As fresh wood was thrown on, the old men who expected to dance began taking off their shoes. Each one put on either an owl-feather headband, tsekwirp, (pl. 22, fig. 4), or else tied a handkerchief about his forehead. Those who had headplumes of split owl-feathers, talo, (pl. 22,

fig. 1, 2, 3), thrust them upright in this headband. An old man then stood up and made a short speech, very loud and emphatic. The other old men grunted three times deep in their chests. The old man then said a few words, and the others grunted once. The substance of the speech was said to be that the dance had come down from their fathers, and that they were going to do it as they had always done it. Then the leader of the dance, without his rattle, took a position close in front of the women, and leaning over, began to mutter the words of a War-dance song. The women listened in silence. The old man varied his muttering by stamping with his right foot and grunting. This continued until the occurrence of one of the ceremonial rests. A second old man then joined the first, and the two sang in a gutteral whisper, at times clapping their hands softly as if to urge the women on. After some time the women began to sing, so faintly at first that the sound was barely audible. The singing was interrupted by occasional pauses or rests. The leader seemed to call for these by clapping his hands sharply once with a deep grunt. During these pauses or rests the men left the dance-circle, but the women remained seated, without movement. The leader gave the signal for more dancing by entering the circle and beginning the words of the next song.

After some time the singing grew more distinct. More of the men joined in at every pause, and the grunting also grew louder and more labored. The dancers marked time to the music by stamping with the right foot. Soon they began to hitch themselves forward in little jumps after each stamp. The singing grew rapidly louder and shriller. By the time the seventh or eighth song was taken up the music was a full-toned chant, of which the words were plainly audible. The dust by this time rose steadily from the feet of the old men as they shuffled backwards and forwards.

There seemed to be no rule governing the number of times the words of each song were repeated. The men joined in certain parts of every song, singing in a very jerky and energetic fashion. In fact, they exclaimed rather than sang. When they were not singing, they grunted in unison in time to the music.

During the eighth or ninth song, the men faced to the left, that is toward the west, and began to dance in a large circle. The dancing step consisted of two jumps, followed by a stride. After completing the circle they always formed a stationary group in front of the women, stamping hard and grunting. At places in every song during the latter half of the Hoxoi dance, marked by a sudden rise in the pitch of the music, the men all raised and shook first their right hands and then their left, their fists being closed.[109a] This was done three times. The old man who led the singing always touched the right side of his neck, in this gesture, with his left fist, fingers out, after he had shaken his fist toward the west. No definite information concerning the significance of the gesture was obtained. The movement in a circle was explained as representing the movement of the cultus eastward from the islands. "The dance came from the west, so we dance from the west," is the way in which one informant put the statement.

The close of each song was marked by a quick, explosive grunt on the part of the men. This was always accompanied by striking the open hands together once.

After the dance had been in progress several hours, the men just previous to each pause formed in line and danced backward. In this movement the hands were clasped together in front, the dancers assuming a stooping posture. The singing and dancing always stopped at the time of the ceremonial pause with surprising suddenness, the leaders breaking into a satisfied chuckle as the final explosive word of the song found them stricken motionless.

Several times in the course of this ceremony a man who seemed to have no other duty raised a saucer full of tobacco in his two hands. As he did so he pronounced "mwau" in what resembled a tone of surprise or astonishment. The dancers always responded with an upward gesture and an expulsion of the breath. This was repeated three times, the third repetition consisting of two expulsions. Between times this man sat motionless near the women. He was said to be called the "Tatahuila," in Diegueño

[109a] The hostility suggested by this gesture, which occurs frequently, is said by some to be the reason why the ceremony is called the "War" dance. The name may however be derived from the whites.

kaponaiL.[110] The tobacco thus held aloft was afterwards smoked by the old men.

As the closing song of the HorLoi the Diegueño always sang the following:

kaipovipaima
povitem yara
tavoyaki natavo
miitara

This song, in contradistinction to those which immediately preceded it, was sung very slowly and very softly. Each dancer removed his headplume and held it in his hand. As the song progressed, they gradually shuffled into a line before the women and stood facing them "Indian file." Holding the plumes in their right hands, they made long vertical strokes in time to the music. From one side the gesture gave the impression of being directed at the women. At every third repetition of the song the dancers waved their plumes skyward with an expulsion of the breath. At the twelfth repetition the leader cried out "tea." The dancers in response gave three quick expulsions of the breath, followed after an instant by a fourth. The leader then cried: "Paropum, paropum!" (throw it away!) The dancers then repeated the last gesture.

During a HorLoi dance which took place at Mesa Grande in September, 1907, the following songs were sung in the order given. They were said to be in the Luiseño language, but are more probably in the related dialect of San Gabriel.

1. awi kwaitomya
 awi yompo yuwiyom
 atsatsa tcunga
2. wipiyom tonya anoti
 saher riki ranito
 waiyoti toroteher
3. monaha monaha (probably incomplete)
4. tomom mari nipam
 tomom mari nipam
 toGorowi
 tomom, *etc.*

[110] See above under Boys' Adolescence Ceremony. "Tatahuila" is a very familiar term in the mouths of both the Luiseño and Diegueño. It is said by both to be a Spanish word. It suggests, however, the Luiseño root *taw-i*, to sit at one side, *tatawi*, to sit customarily at one side, plus the noun-ending *-la*. On the other hand the regular suffix denoting the action of a verb is *-c*, and the accent should not leave the stem syllable, so that the Luiseño form to be expected would be *tata'wic* rather than *tatawī'la*, in Spanish orthography *tatahuila*. The tempting etymology is therefore at least doubtful.

5. tsoxa xita tsoxa xita
tsaxoxa kiyaiya
6. hotom kita
monini atoxa
mani sapame
7. pamiwat pase
hisne hixo awiwi
8. yaare haima
tomo niki
kwinneya yainga mora
9. akaeira waiyoti
miyaim vitaya
yikaa waiyoti
nikoma
10. yekino yekino yekino
saho nitomya
miya homa nita
saxo haitomya
hayuki hayuki
hahai cahovit
11. honi maiyemo
mini nompemo
mini nokirowi
12. hwemini yo hwemini
yomtero (word or words missing)
13. pawa xapa
wami nopawe
yumpeni kete
14. hawe yumbri
hana maipo ampur
vitamtero wamki hawe
yumbri
15. hetciyom hanita
yonitsa pehamtsur
komya yonitsa
pehamki
16. haita ponikwa
. . . manikwa (fragmentary)
17. tsera tomyac
rera tomyac
cina pera
mini tomyac
kokeni cino
18. wipiri (fragmentary)
19. gai nita (fragmentary)
20. awe awini awe awini
kwaiye komnipa
21. mommai yomtera
mommai toroyote komya
22. nehyo pama . . .
okami peyo . . .
nitso
23. tamki kiyi
yaiyu vita
24. metsair waipemo
kiyoni
25. The final song was sung very softly:
kaipovi paima
povitem yara
tavomai yeki natavo
maitara

The following series of songs were sung at a HORLOI held at Santa Ysabel in September, 1907. Like the former series they are said to be Luiseño.

1. The first song was inaudible.
2. kadjuo wamki
sia waipo
3. tcawaiko mero
muni . . . (incomplete)
4. tama huna wipeni . . . (inplete)
5. haowa haiwano
monini
6. tolema tolema
xapo nika
xapo wiki mini
7. tekmai huni a hwemini[111]
cukai tekmai huni
howa tekmai
8. ata xatopra[112]
awiwi umtero
awi ata

[111] Compare the twelfth song of the preceding series.
[112] Compare the twelfth song of the preceding series.

9. mina nomri mowiki
 mina nomriwi
10. ota nita ota nita
 omni partemui
11. tserau ahawi
 mane nipeni tsiro
 mane nipeni
12. terera tomyaxa terera tomyaxa[113]
 Gina pera mini tomyaxa
 tokeni Gino
13. Ge nita[114]
 manita
 awi wiromni
 yoni yoni
 manita
14. kwate koni take
 ana xanoko
15. tayawe
 tayawe
16. awe awini awe wini
 kwaiye komnipa
17. karampa pawe
 wimpeki yoiyo
18. nekema yato nika
 kenonat yatoma
 yato nika kenonat
19. hayo tipeno[115]
 waiyoti moya
 wira wira wira wira
20. awiwi haiyom hoka
 tarampa hoka
 tarampa heron
21. awiwi yomkeri[115]
 waipeno
22. mona naka mona[116]
 nitomya
23. hana maimaka
 koram koram koram
 hotcepe niturti turti
24. awewe hyombri[116]
 wihyombri ataku
25. kaipovi paima[117]

THE FIRE CEREMONY.

This ceremony never occurs by itself, but always follows some other dance. When observed by the writer it occurred late at night after a HORLoi or War dance. It also occurs as part of the kusī or toloache ceremony and the Clothes Burning. After the close of whatever rite preceded it, some one of the old men always made a very emphatic speech, saying that the Fire dance had descended from long before, and was very ancient.[117a]

Men and women then gathered about the fire in a large circle. The man in the company who usually leads the dances then began to sound his rattle. The people moved about the fire in a "side-step" to the accompaniment of this rattling, without singing. Two circles were gradually formed, one of them inside of the

[113] Evidently the same song as the seventeenth of the preceding series.

[114] Evidently the same song as the nineteenth of the preceding series.

[115] Compare songs 19, 21, 22, and 24 of this series with 9, 24, 10, and 14 of the preceding. With 19 compare also 2 of the preceding series.

[116] See footnote 115.

[117] The same as the final song of the preceding series.

[117a] The occurrence of these emphatic ceremonial speeches or addresses is, as will be observed, a feature of all Dieguefio rites.

...directions. At frequent signals from ... the movement was reversed. Shouts ... change. After some time the ... to the younger people, who one ... only the old men and women in ... became more sedate. The dancers ... which circled about the fire from ... moved forward with a twisting ... explained, is intended to swish back ... formerly worn by the women. ... arms, holding them out from their ... or four steps. Then they faced ... hands all around. While they ... sideways to the left. After several ... loosed their hands and struck down- ... Then they stamped three times with the ... each stamp with a grunt. This was ... rest.

... to the accompaniment of a song:

...spampe penovi
...i yo-ona

... line the entire company squatted sud- ... together. The character of the dancing ... Each dancer jumped sideways to the left ... by a short step to the left. After some ... squatted or crouched three times, point- ... with the left hand, then with the right, and ... This action was followed by a rest. ... resumed, to a different chant, of which ... words:

waiyoti waiyoti[118]
...onga meteya
...iwe niteeyo
...ma avi niteeyo

... song the men stamped violently. At ... fists "underhand" at the fire. Mean- ... of the preceding, have the appearance of

while they moved about in a circle, of which the center was the fire, in short jumps, each one followed by a single step. At the end of the singing, the leader shook his rattle, and all grunted and struck downward toward the ground. Then he rattled again, and all motioned away into the air and expelled the breath.

When the dancing began again, the step consisted of two jumps followed by a short step. The women had by this time all dropped out, and only about a dozen old men were actually taking part in the rite. The song was as follows:

watani watani
waiyai mani

At the close the leader rattled two loud strokes and then a long roll, calling as he did so, "mwau." All stamped their feet once and grunted. He repeated the rattling and the exclamation, and all expelled the breath and motioned into the air.

The words of the next song were:

pako weknam
pako dikile (incomplete)

When the fifth song began, the men ran sideways around the fire quite rapidly. The singing was also very fast and loud. The rattling took on the character of a steady, beating cadence. The entire performance assumed an excited appearance. The words of the song were:

aGorowi take
tcaposon take
aGorowi

The old men gave a loud yell in the midst of the song, and dropping on their haunches close to the fire, began pushing the blazing wood in a pile with their feet. Leaping up after a moment they continued to dance, but soon returned to the fire again. They danced in on the coals as much as they could, and each man before he was driven back by the heat would throw himself on his haunches, kick at the fire, and surreptitiously pile in a little dirt with his hands. In this way the fire was gradually extinguished. The women throughout kept up a shrill and rapid chant. The effect of the whole was rather good. The leaping figures of the dancers were outlined in inky black against the

ruddy light of the bonfire, and their swirling feather headplumes lent an air of wildness. Even the whites who looked on were visibly impressed toward the close, while the young Indians seemed completely awed. When nothing was left but blackened coals and a dim pile of glowing embers, the dancers left the circle and the ceremony was over.

This ceremony was formerly accompanied by the exhibition of many magic tricks. A quantity of liquid, said to be a decoction of willow bark, was drunk by the performers before coming to the dance. At the proper time they took slender curved wands twelve or fourteen inches long, called "swallowing-sticks," ketat,[119] and inserted almost the whole length in their throats. The violent vomiting which ensued was held to make the fire mysteriously "cool." It is likely that in the old days when no shoes were worn, the toughness of the soles of the dancers' feet enabled them to dance actually on the coals without much discomfort. Even at the present day their method of dancing would severely burn a bare-footed white man.

OTHER CEREMONIAL MATTERS.

A moon ceremony among the Luiseño is mentioned by Miss DuBois[120] in the following words: "They sing 'Wy-ot, Wy-ot' nine times, then 'Ne-yonga (My head), ne-chaya, tomave.'[121] The dances were to please the moon and prevent his waning."

This seems to correspond to what is known as the "Sick Moon" ceremony among the Diegueño. Information about this ceremony is not very satisfactory, but the following particulars were at length obtained by questioning several informants. The ceremony is held when the moon rises in the daytime and looks small and pale. The people at this time went out and bathed themselves and had footraces "to please the moon and make him glad." At the same time the women danced, each one by herself, and sang songs. Some of these songs are the following:

[119] DuBois, op. cit., plate 16.

[120] Journ. Am. Folk-Lore, XVII, 185, 1904. See, also, present series, VIII, 11, 1908, and Boscana, p. 298.

[121] Compare the Fire Dance song before given on p. 326.

1. haLya kwasau	moon eat[122]
inyau kwasau	sun eat
kwasau kwasau	eat eat
ī ī	ī ī
2. kamaiyo xwao kwatcayi	
3. wami yoik amai	crying he-is up-there
4. axo kaiyax wumi	 crying
5. xatpa maxo	
6. axikwa o-o xotcamiya	owl is-singing

The belief was that "if they sang and made a noise and laughed down here on earth, the moon would grow cheerful and get well and large again."

GAMBLING.

Gambling among the Diegueño as among many primitive peoples has so much of the formal in it, and so many "charms" connected with it, that it becomes almost a religious observance.

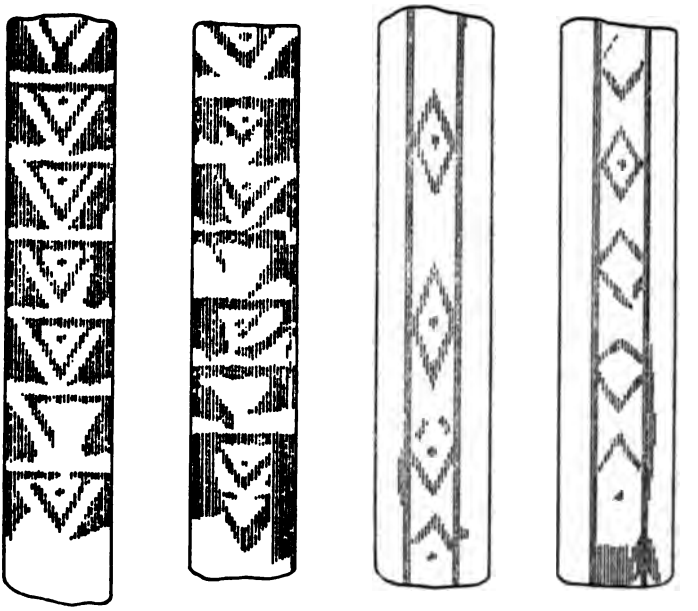


Figure 3.—Diegueño women's dice from Campo. Mus. No. 1-14483.

[122] This song was said by the interpreter to refer to an *eclipse*.

The Diegueño play at the present time several gambling games. Some of these have been introduced by the Mexicans and Americans. A four-dice game (fig. 3) is said to have been learned from the Mohave. The large, flat wooden "dice" with which it is played are found only among the southern Diegueño, who are nearest the influence of the Mohave and other eastern tribes of the Yuman family. A gambling game with stick and hoop, in which the player tries to throw the stick through the hoop while rolling, is mentioned in Diegueño mythology.[123] This game is no longer played. There is a game played by the Diegueño at the present day, however, which is believed by them to be of ancient origin. This game, called "peon," in Diegueño homarp, is mentioned in the Chaup myth.[124] It is the only game among the Diegueño which is played ceremonially.[124a]

The game is played by two sides of four players each. Each individual is provided with two small cylindrical objects of bone or wood, similar except that one has a black band around the middle. These cylinders or "peons," in Diegueño nyumumarpai, are clasped one in each fist of the player. One side guesses in which hand the other side hold their white peons.

These guessing bones are of course a familiar gambling device along the whole Pacific coast. In the method of play, however, followed by the Diegueño, the players are not considered as individuals. The side only is considered in the guessing. The players making the guess agree together, and one man offers the resulting conclusion as their joint guess. So also the other side is looked upon not as individuals but as a unit. The "guess" applies to all equally. At the beginning of the game lots are drawn to determine which side is to begin the guessing and which side shall act on the defensive. After that, every player who is correctly guessed must surrender his peons for the time being to the player opposite him. When all the pairs of peons have been won from the players of the first side, the losing side must begin to guess, the winning side taking the

[123] Journ. Am. Folk-Lore, XIX, 157, 1906.

[124] *Ibid.*, XVII, 239, 1904.

[124a] For an account of this game, see Stewart Culin, "Games of the North American Indians," Ann. Rep. Bur. Am. Ethn., XXIV, 323-325.

defensive. For every bad guess, the players acting on the defensive get one point.

The peons are adjusted to the wrists of the players by means of leather thongs, to prevent any sleight-of-hand work at the critical moment. When adjusting the peons the players cover their hands with a blanket, the edge of which they hold in their teeth. Before dropping the blanket they fold their arms, to hide the peons still further. The guessing is indicated by pointing. Pointing with one finger indicates that the white peon is believed to be in the hand pointed at. Pointing with two fingers implies that the peon is believed to be in the opposite hand. The guess is merely a "trial," however, unless the player commits himself to it by a spoken word.

The method followed in play is to point at a player in silence, and then endeavor to read from his expression whether the guess thus indicated is or is not the correct one. It is a fact that some men always betray themselves at the first "point" to the beady scrutiny of the opposing players. Others can assume such a wooden expression that they may be wrongly guessed five or six times in succession. Since each poor guess represents a point won, such players are much in demand as partners. In order to hide or cover all facial expression, each player yelps and throws himself about, folding his arms and keeping his hands out of sight. In actual practice the members of the guessing side go over the opposing players separately, clapping their hands and pointing until the location of the peons is thought to be understood. They then compare notes, and one of them, speaking for all, claps his hands with a gesture and calls out the guess. Every one of their opponents who is caught must give up his peons. But for every bad guess a point is lost. This goes on until all of the peons have passed to the guessing side, or until all of the points in the game have been won by the opposing side. As soon as all of the peons are won, the guessing, as already indicated, reverts to the opposite side.

The winning of fifteen points constitutes the game. Points are represented by fifteen long wooden counters, esełkwak. At the beginning of the game these counters, together with the stakes which are wagered, are placed in the hands of an umpire, who

The Dieg[illegible] ... between the two rows of players. Some of [illegible] ... counts are won by each side. After icans. A[illegible] ... players pass them back and forth the Mohav[illegible] ... war. The stakes in this game often are foun[illegible] ... hundred dollars. Two or three days are the inthe[illegible] ... bring a game to a close. Yuman f[illegible] ... inter-village in character. This trait has the player[illegible] ... late years, though "teams" are still is mentio[illegible] ... with certain rancherias. The women played. T[illegible] ... what represents their particular locality day, howev[illegible] ... hoot while the play is in progress. Spec- This game[illegible] ... the following: the Chaup[illegible] ... which is pl[illegible]

3. haŏko melume[128]
hakŏ melume
haĕwila mĕnĕwila melume

The gam[illegible] ... accompany this game. The flow- individual[illegible] ... in Spanish chuchupate, are dried bone or woo[illegible] ... This powder is rubbed over the face the middle[illegible] ... and a little of it thrown furtively on umarpai, are[illegible] ... one side. This is held to bring luck. guesses [illegible] ... a little of this chuchupate, or a little

These[illegible] ... occasionally the tails of small snakes are vice alone[illegible] ... added into a "powder." This powder is ever, follo[illegible] ... thought to poison the other side "a as individ[illegible] ... on the peons" quickly. Black spiders The player[illegible] ... and scorpions also are used in this way. the result[illegible] ... side is look[illegible] ... DIRECTION. "guess" ap[illegible] ... lots are drav[illegible] ... a peculiar association of direc- and which s[illegible] ... ideas appear together frequently player who [illegible] ... religious formulas and rituals. the time being[illegible] ... of peons have[illegible] ... losing side [illegible] ... graph record 701.

[illegible] ... rtification of Color with the Cardinal [illegible] ... 1908.

[illegible] ... Journ. Am. Fo[illegible]

[illegible] ... *Ibid.*, XVII, 230[illegible]

[illegible] ... For an account of [illegible] ... American Indians," Am[illegible]

North is associated with red, east with white, south with blue or green, these colors not being distinguished by the Diegueño, and west with black.

One of the songs accompanying the Eagle dance given above is:

> The white eagle puts his nest on cliffs.
> The eagle from the west puts his nest on sycamore along the edge of the creeks.

The eagle from the *west* is in the song contrasted with a "white" eagle. The western eagle seems therefore to occur to the native mind as black. The association of west with black is carried out by the statement of the old men, that when the dancers witch a white eagle to death in the Eagle-dance, as described above, "they send him east. When they kill a black eagle they send him west."

In the myth of Chaup,[127] there is shown a corresponding feeling for color connected with north and south. "The elder sister, who was a witch-doctor and knew everything, stood up and held her hand to the north and brought down a red stone. . . . Then she held up her hands to the south and got a blue stone of the same sort." Further on in this same story,[128] the corresponding colors for east and west are indicated. "The boys stood and held their hands to the east and got some white clay and with it they painted their cheeks. Then they held their hands to the west and got some black clay."

A complete color-system for the four cardinal points has already been quoted in connection with the Clothes-burning ceremony. The account of the original ceremony is as follows:

From the north he (the first man making the ceremony) brought a red rock, from the east a gleaming white rock, from the south a green rock, and from the west a black rock because the sun sets there. Then he said: "My father and grandfather are dead, so now I sing."

menai dispa tcawai tcawi	now dead I sing
menai dispa tcawai tcawi *(pointing)*	now dead I sing *(pointing)*
xitoL kawak enyak awik	North, South, East, West
amai amut	up, down

[127] Journ. Am. Folk-Lore, XVII, 218, 1904.
[128] *Ibid.*, 226.

Certain passages in Diegueño mythology seem to indicate that this system is not always understood. In the Chaup story, for instance, the following passage occurs:[129] "Then she held up her hand to the sky and got a black sticky substance . . . and then she reached out her hand toward the west and got some shining stuff like quicksilver." This of course contradicts the statement already made, that west is associated with black and east with "gleaming white." The author of the quoted passage, however, elsewhere confuses her Diegueño directions east and west. In her paper in the present series[130] east is given as awik, and west as nyak, the terms being reversed. The confusion of the color association in the above passage may therefore have risen only in the English translation, and not from any confusion in the mind of the native narrator.

The colors are however to a certain extent confused by the Diegueño themselves. The present writer for instance obtained the following sentence from an old man at Campo named Tciwal: "He reached his hand to the north (he was a wonderful medicine man) and got a blue flint." North of course ought properly to be "red." In this case the contradiction came from an actual confusion in the informant's mind. The writer's attention was attracted by the violation of the usual color rule and the argument which followed precluded the possibility of any misunderstanding of the narrator's words.

It must be said however that in all such violations of the rule which have so far come to light in Diegueño mythology, the color in question is always applied to the direction opposite to the proper one if any mistake is made. North and south are always identified with one pair of colors, east and west with another. The order within these pairs merely is sometimes reversed. On the whole, in spite of occasional discrepancies, the color-system outlined above may be considered well established.

[129] Journ. Am. Folk-Lore, XIX, 151, 1906.

[130] Op. cit., p. 125, record 1090.

CEREMONIAL NUMBERS.

A prominent element in all ritualism, whether of the primitive or civilized variety, is the consciousness of a sacred or ceremonial number. The exact implication of the term "ceremonial number" is illustrated by what we know of the special significance among Hebrews of the number seven: or among Christians, especially Roman Catholics, of the number three. A corresponding usage is apparent in all the religious practices of the Diegueño. The author can say, however, what every reader of the foregoing pages has seen for himself, that more or less confusion exists. The Diegueño themselves are unconscious of any rule. Nor does their mythology reflect any definite feeling in the matter. In the absence of direct testimony, however, we can derive certain conclusions from the rituals themselves. Ceremonial actions and gestures are repeated usually either three or four times. The frequent "growling or groaning sound accompanied by blowing," and the exclamation "mwau," are repeated usually thrice, and only occasionally four times. In the latter case, the third repetition is felt by the people to be "doubled." "The last one is just for winding up," is the way one informant put it. In the HORLOI dance the saucer of tobacco is raised three times; and many other instances could be quoted. Six sometimes occurs, appearing to be however a duplication of three. Two and also seven do not appear. Five was observed by the writer only once. The ceremonial number varies therefore between three and four, and of these, while the feeling is not very definite, three is much the more usual.

TOBACCO.

While the Diegueño do not seem to attach much ceremonial importance to plants, there is a definite religious feeling associated with tobacco. The shape of the Diegueño stone pipe (pl. 21, fig. 4) indicates that tobacco was used by them primarily in a ceremonial way. This pipe was not adapted for ordinary smoking, since it is a short, thick cylinder in outline. In smoking it has to be held in a perpendicular position, with the head tipped back and the face turned upward. Tobacco smoke was blown on a man in

case of sickness. Tobacco smoke was also blown three times into the air to prevent disease and misfortune when ill-omened events occurred, for instance the cawing of a crow or the cry of a coyote. The religious use of tobacco seems to be older than the awik or jimsonweed cultus, since it occurs in Diegueño mythology. For instance:[131] "'I don't know which of us will get the best of it,' said the boy. But he had some tobacco in a piece of cane which he took from his ear and smoked, and blew the smoke at the bear and put him to sleep so that he passed on. The bear woke up and said . . . 'He has more power than I.'" As just noted, tobacco is still used ceremonially in the Hoxoi dance, though its exact significance in native thought could not be ascertained.

DIEGUEÑO BELIEFS CONCERNING ORIGIN.

As already suggested in the discussion of the Keruk ceremony, the Diegueño explain the origin of certain of their religious practices in the myths which concern a wonderful being called Chaup, to be identified in all probability with the physical phenomenon of ball-lightning. This myth has been contributed to the *Journal of American Folk-Lore* in complete form by Miss Constance Goddard DuBois, under the titles of "The Story of Chaup" and the "Story of Cuyahomarr."[132] It must be noted in passing that this Chaup,[133] or Tcaup in the orthography of the present paper, is in many respects the culture hero of the Diegueño. From his activity, according to the myths, date many of the phenomena which taken together compose the world as we latter-day peoples know it. For instance, the plants and animals used to be people until Chaup or his relatives imposed on them their present appearance. Cricket,[134] Jack-rabbit,[135] and Coyote[136] are mentioned specifically in one myth.

[131] Journ. Am. Folk-Lore, XIX, 161, 1906.

[132] Journ. Am. Folk-Lore, XVII, 217, 1904, and XIX, 147, 1906.

[133] Perhaps better "Chaups," in the plural, since his remarkable attributes are in the myths possessed also by his father, his uncle, and his grandmother Sinyaxau or First Woman. Sinyaxau is the "Sinyohauch" of Miss DuBois' narratives.

[134] Journ. Am. Folk-Lore, XIX, 147, 1906.

[135] *Ibid.*, p. 160.

[136] *Ibid.*, p. 163.

Animals had no names, so he named them.[137] They had no distinctive markings (for instance the red wattle of Roadrunner, the stripes on Mock-Orange, and the dark shading on Coyote) until Chaup marked them.[138] These mythological "heroes", Chaup and his relatives, first brought storms[139] and disease[140] into the world. They acted generally speaking as models or prototypes for the customs and ceremonies of succeeding generations. Sinyohauch tells her sons, for instance:[141] "Do not quarrel (on this journey). The people who come after will do the same as you (do)". This copying by the people of an action performed by Chaup[142] was the origin of the great Image or Keruk mourning ceremony. Such then, in the Diegueño conception, is the origin of the more striking features of animate nature and the usages obtaining among human beings.

Certain elements in their culture, however, are supposed to have arisen in another manner. The narrative concerning the second source seems by the native informants to be felt as an inherent part of a certain definite myth of "Creation" or Origin of the Mundus. We have two independent ideas, then, among the Diegueño, with reference to this general topic of origins. These are embodied in two types of myth. One type, the "Chaup" story, tells among other things of the modification of an already existing world, by "Chaup." The other type tells of the origin of the mundus itself, and is a real Creation story.[143]

The fact of Creation is mentioned and described in several places in the literature now extant[144] concerning the Mission Indian area and cultures. The Diegueño account for numerous

[137] *Ibid.*, p. 160.
[138] *Ibid.*, p. 162.
[139] *Ibid.*, p. 148.
[140] *Ibid.*, p. 163.
[141] *Ibid.*, p. 148.
[142] *Ibid.*, p. 153.

[143] It is impossible to say definitely whether the two accounts of Origin are mutually complementary, or whether they spring from vague and rather inconsistent beliefs on the part of the Diegueño. As they stand in translation they are certainly contradictory, but this may be only on the surface.

[144] For the various Mission Indian myths on the subject, consult: Boscana, 241-257; Constance Goddard DuBois, Journ. Am. Folk-Lore, XVII, 185, 1904; XIX, 52, 1906; XIV, 181, 1901; XXI, 236, 1908; also *ibid.*, 234, a Mesa Grande song of Creation, and *ibid.*, 229, Kachawharr, a song series from Jacumba, about Tuchaipa and Yokomatis; Congr. Intern. des Americanistes, XV Session, Quebec, II, 129, 131, 1906; Univ. Calif. Publ. Amer. Arch. Ethn., VIII, 123, 1908; A. L. Kroeber, Journ. Am. Folk-Lore, XIX, 309, 1906; John P. Harrington, Journ. Am. Folk-Lore, XXI, 324, 1908.

reasons must be considered as a distinct and independent narrative, not related to the stories told by the neighboring Mission peoples.[145] The present writer obtained a rather complete outline of this Diegueño myth from an old man at Campo[146] calling himself a Kamiyai.[147] For several reasons this story is interesting in the present connection. In the first place, and most important of all, it is a fair sample of the primitive sacred story, as found among the Diegueño. In the second place, it outlines as briefly as could be accomplished by any other method the beliefs of the people in question concerning the organization of the mundus. This among any primitive people must be considered a definitely religious topic. Finally, it helps to throw a certain illumination, from an independent view-point, on the broader subject of Diegueño mythology, a subject which is more or less germane to our present purpose. For these reasons it seems proper to quote it in full, as obtained from the Diegueño informant.

CREATION MYTH.

In the beginning there was no earth or land. There was nothing except salt water. This covered everything like a big sea. Two brothers lived under this water. The oldest one was Tcaipakomat.[148]

Both of them kept their eyes closed, for the salt would blind them. The oldest brother after awhile went up on top of the salt water and looked around. He could see nothing but water. Soon the younger brother too came up. He opened his eyes on the way and the salt water blinded him. When he got to the top he could see nothing at all, so he went back. When the elder brother saw

145 For a full treatment of this theme see the paper by the present writer in Am. Anthr., n. s. XI, 41-55, 1909.

146 This may perhaps be the informant mentioned by Miss DuBois (Journ. Am. Folk-Lore, XIX, 162, 1906), from whom she obtained indirectly her "Yuma" creation story. (See *ibid.*, XXI, 236, 1908.)

147 The Mohave designate as Kamia a tribe living on the desert between the Yuma and the Diegueño. That these people were closely related to the Diegueño of the Missions, is shown by the fact that the Mohave name for the latter is Kamia axwe, foreign or hostile Kamia.

148 Miss DuBois gives Tuchaipa as the elder and Yokomat or Yokomatis as the younger, but says (Journ. Am. Folk-Lore, XXI, 229, 1908; and Congr. Intern. American., XV, Quebec, II, 131, 1906) that the two names are sometimes given in one: Chaipakomat.

that there was nothing, he made first of all little red ants, miskiluwi (or ciracir). They filled the water up thick with their bodies and so made land. Then Tcaipakomat caused certain black birds with flat bills, xanyiL, to come into being. There was no sun or light when he made these birds. So they were lost and could not find their roost. So Tcaipakomat took three kinds of clay, red, yellow, and black, and made a round, flat object. This he took in his hand and threw up against the sky. It stuck there. It began to give a dim light. We call it the moon now, haLya. The light was so poor that they could not see very far. So Tcaipakomat was not satisfied, for he had it in mind to make people. He took some more clay and made another round, flat object and tossed that up against the other side of the sky. It also stuck there. It made everything light. It is the sun, inyau. Then he took a light-colored piece of clay, mutakwic, and split it up part way. He made a man of it. That is the way he made man. Then he took a rib[149] from the man and made a woman. This woman was Sinyaxau, First Woman.[150] The children of this man and this woman were people, ipai. They lived in the east at a great mountain called Wikami.[151] If you go there now you will hear all kinds of singing in all languages. If you put your ear to the ground you will hear the sound of dancing. This is caused by the spirits of all the dead people. They go back there when they die and dance just as they do here. That is the place where everything was created first.

A big snake lived out in the ocean over in the west. He was called Maihaiowit.[152] He was the same as Tcaipakomat but had taken another form. This big snake had swallowed all learning. All the arts were inside his body—singing, dancing, basket-making, and all the others. The place where the snake lived was

[149] This may be an original element and not a gloss from the Biblical myth. The informant is a "bronco" (unbaptized) Indian, who has never been under the influence of the missionaries.

[150] From siny, woman, and axau, first; apparently the same as Miss DuBois' Sinyohauch (Journ. Am. Folk-Lore, XVII, 222, 1904), in which the final ch is guttural.

[151] Cf. present series, VIII, 123, 1908; Journ. Am. Folk-Lore, XIX, 315, 1906; Am. Anthropologist, n. s. VII, 627, 1905.

[152] Journ. Am. Folk-Lore, XIX, 315, 1906; XXI, 235, 1908; Am. Anthr., n. s., VII, 627, 1905.

called Wicuwul (Coronado Islands?) The people at this time at Wikami wished to have an Image Ceremony. They had made a wukeruk, ceremonial house, but did not know what else to do. They could neither dance nor make speeches. One man knew more than the others. He told them they ought to do more than just build the house, so that the people who came after them would have something to do. So they made up their minds to send to Maihaiowit and ask him to give them the dances. Another sea monster, Xamiikotat, was going to swallow everyone who tried to go out to Maihaiowit. So the people said the man who went had better change himself into a bubble.

So the man who had first spoken about the matter changed himself into a bubble. The monster swallowed him anyway. When he found himself down inside he first went north, but he could find no way out. Then he went south, east, and west but could find no way out. Then he reached his hand toward the north—he was a wonderful medicine-man—and got a blue flint, awi-haxwa. He broke this so as to get a sharp edge. Then he cut a hole through the monster and got out. Then he went on and on till he got to the place where Maihaiowit lived. The snake had a big circular house, with the door in the top. The man went in there. When the snake saw him he called out:

Mamapitc inyawa maxap meyo (Who-are-you my-house hole comes-in?)

The man answered:

Inyatc eyon enuwi (I it-is, Uncle).

"Tell me what you want," said the snake.

"I came over from Wikami," said the man. "They are trying to make a wukeruk ceremony there, but they don't know how to sing or dance."

"All right," said the snake, "I will come and teach them. You go ahead and I will come slowly."

So the man went back. The monster came after him reaching from mountain to mountain. He left a great white streak over the country where he went along. You can still see it. The people at Wikami were expecting him, so they cleared a space. He came travelling fast as a snake travels. He went to the wukeruk. First he put his head in. Then he began slowly pulling

his length in after him. He coiled and coiled, but there was no end to his length. After he had been coiling a long time the people became afraid at his size. So they threw fire on top of the house and burned him. When they put the fire on him he burst. All the learning inside of him came flying out. It was scattered all around. Each tribe got some one thing. That is the reason one tribe knows the wildcat dance and another the wukeruk and a third are good at peon. Some people got to be witches or medicine-men (kwusiyai), and orators, but not many.

The head of Maihaiowit was burned to a cinder. The rest of his body went back west. It did not go very far. In the Colorado river there is a great, white ridge of rock. That is his body. A black mountain near by is his head. The people go to the white rock and make spearheads.

After the house was burned up, the people were not satisfied, so they scattered in all directions. The people who went south were the oldest. They are called Akwal, Kwiliyeu, and Axwat. The rocks were still soft when the people scattered abroad over the earth. Wherever one of them stepped he left a footprint. The hollows around in all the rocks are where they set down their loads when they rested.[152a]

Even a hasty reading of this myth makes evident its dissimilarity with the ordinary Luiseño and Mohave accounts of creation. It may be well to add in this place that a systematic comparison of the narratives in detail confirms the impression of dissimilarity conveyed at first blush by the general structure and underlying idea of the story.[153] A certain external relation between the myth outlined above and the Mohave story[154] is of course apparent. The mountain Wikami, for instance in the

[152a] A full account of the Yuma creation story has been contributed by Mr. John P. Harrington to the Journal of American Folk-Lore, XXI, 324, 1908. The relationship between the above schematic account and Mr. Harrington's full version of the Yuma story is at once evident.

[153] See Am. Anthr., n. s. XI, 41-55, 1909. Thirteen prominent story elements are there chosen for study. Of these, it develops that the Mohave and Luiseño myths have nine in common. The Diegueño story, on the other hand, has only three elements in common with the Luiseño, and but two in common with the Mohave. This is quite insignificant, since any two totally unrelated mythologies might to this limited extent be similar.

[154] Journ. Am. Folk-Lore, XIX, 314, 1906.

present story, and the monster Maihaiowit, correspond to the Mohave "Avikwame" and the monster "Humaaareha." This relationship does not seem to extend down into the story-elements proper.

It is of course impossible to determine at this time, either from the myth just quoted or from other versions, just what elements enter properly into the Diegueño myth. All the evidence extant, however, points quite unmistakably to the conclusion that as far as the mythology of Creation is concerned, the Diegueño are thoroughly independent of the Shoshonean peoples north of them.

It must be noted in passing that the "meteor" or electric fireball, Diegueño Teamp or Kwiyaxomar (Cuyahomarr), Luiseño Takwish, Mohave Kwayu, is also prominent in all the mythologies of the Mission area.[155] As a corollary to the theme discussed just above, it is to be observed that the Diegueño give this subject, too, a characteristic treatment of their own. The physical phenomenon which is the basis of the stories is apparently the same everywhere, namely, ball-lightning. A certain confusion has arisen in this regard, owing to the use in various papers of the word "meteor" to describe the manifestation. The presence of this word in the literature of the subject is in all likelihood to be charged to a loose employment of the term, in the first place, by uneducated native informants. The being described in the myths is widely thought to be accompanied by thunderings, to have a "bright" or "beaming" appearance, and to fly about close to the surface of the ground. These traits unmistakably characterize ball-lightning rather than meteors.[156] The terrific action of the electric fireball would, at least in the mind of the present writer, account in part for the terror in which the being is held by all the Mission peoples. However this may be, the Luiseño and Mohave "cannibal meteor" stories offer almost no similarity (outside of concerning the same subject) to the corresponding Diegueño tale. This being, who as we have seen is

[155] *Ibid.*, 316. *Ibid.*, XVII, 217, 1904. *Ibid.*, XIX, 147, 1906.

[156] The present writer has never met the word "meteor" in this connection among native informants, and has found the being in question identified both in Luiseño and Diegueño territory with the electric fireball.

the culture hero of the Diegueño, is apparently regarded as a malevolent demon among the Luiseño and Mohave.

It is perhaps too early to say that the Diegueño have no myths other than the Chaup and Creation stories. We may safely conclude however that these two are by far the most important types of myth. It is also safe to say concerning Diegueño mythology that while it seems to be restricted in scope, its affiliations are to be sought, not among the mythology of the Shoshoneans as has at times been suggested, but among that of the peoples, related linguistically to the Diegueño, who live to the south and east.

CONCLUSION.

We may, in conclusion, carry away several definite facts concerning the religion of the Diegueño people. One such fact is, that a certain part of their religious practices are, so far as externals are concerned, common also to the Luiseño and Cahuilla. An equally rich and much older part of this worship is thoroughly and inherently Diegueño. As a basis for at least this older part of their ceremonial, they have a rich and varied, though not a voluminous mythology. We are entitled to a vehement suspicion that the songs invariably used as the accompaniment of their dances, bear a definite reference to this mythology. In fact only the somewhat advanced decadence of their religious practices, and the unfortunate fact that their language has never been exhaustively studied, prevent the final establishment of this fact. In this one trait alone they somewhat resemble their kindred, the Mohave. In mythology, finally, they offer a sharp contrast to their Shoshonean neighbors, the Luiseño and Cahuilla. The real affiliation of the Diegueño religion is, like that of their mythology, probably to be sought among their kindred, the other southwest peoples of Yuman stock.

EXPLANATION OF PLATE 21.

Fig. 1.—Crescent-shaped ceremonial stone. Mesa Grande. 1-13747[1].

Fig. 2.—Toloache mortar. Mesa Grande. 1-13742.

Fig. 3.—Stone cup for drinking toloache. Mesa Grande. 1-13743.

Fig. 4.—Stone pipe. Capitan Grande. 1-[illegible].

Figures are ⅔ natural size.

[1] The numbers given are the catalogue numbers of the Museum of the Department of Anthropology of the University of California.



DIEGUEÑO STONE OBJECTS.

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EXPLANATION OF PLATE 22.

Figs. 1-3.—Headpieces of owl feathers. Mann Granda. 1-12962, 1-12761, 1-12780.

Fig. 4.—Headband of owl feathers. Mann Granda. 1-12962.

Figures are .12 natural size.



DIEGUEÑO FEATHER OBJECTS.

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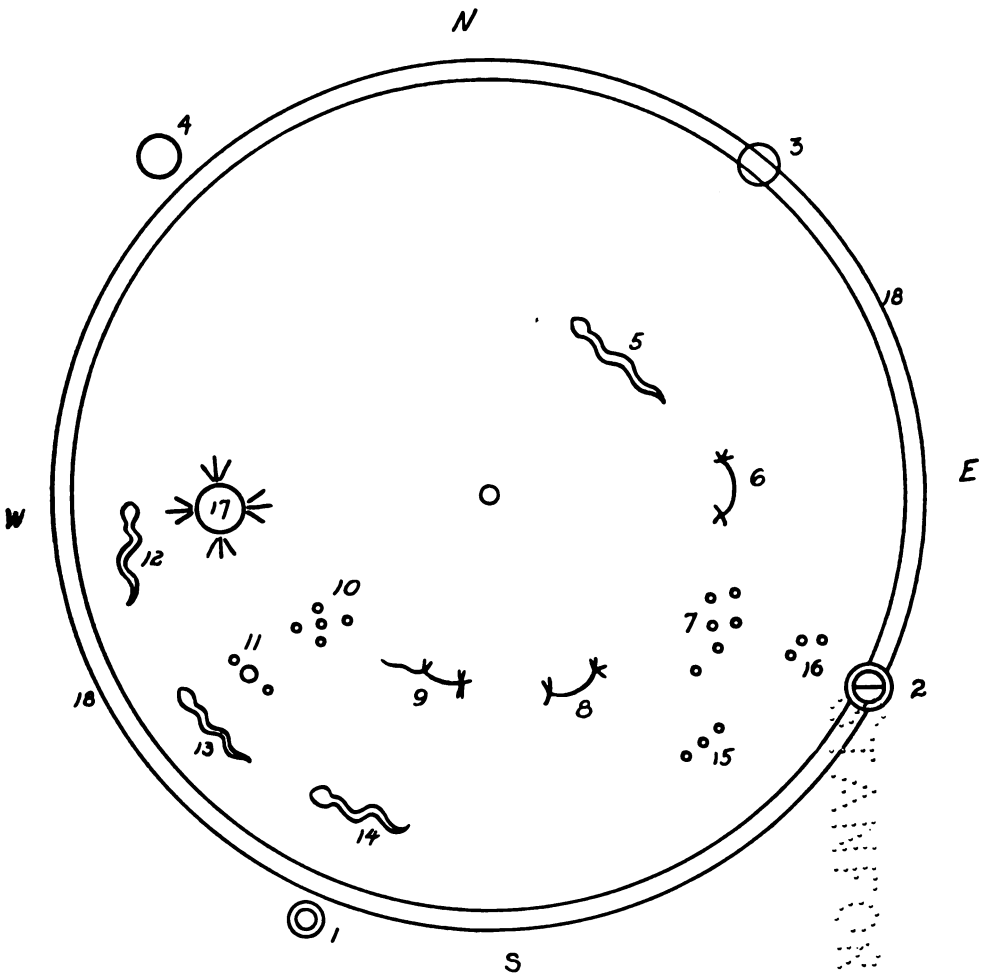


EXPLANATION OF PLATE 31.

[illegible]



ANCIENT FUNERAL JAR.



DIEGUEÑO GROUND PAINTING.

EXPLANATION OF PLATE 26.

Ground Painting made by Antonio Mason and Jo Waters, old men at Mesa Grande.

1, 2, 3.—Kalmo and wittirt, teloache mortar and pestle.

4, 5.—Awi, rattlesnake.

6.—Xatatkûnr, milky way.

7.—Amut kwaptcurpai, world's edge. There is some doubt as to the correct color for this figure.

8.—Halyaxai, new moon.

9.—Halya, full moon.

10.—Inyaa, sun.

11.—Hatapa, coyote.

12.—Saiv, buzzard star.

13.—Crow.

14.—Halturt, black spider.

15.—Katckurlk, wolf.

16.—Amu, mountain-sheep, Orion.

17.—Hatca, Pleiades.

18.—Awi-nil, black snake.

19.—Awi-yuk, gopher snake.

20-23.—Mountains.



DIEGUEÑO GROUND PAINTING.





EXPLANATION OF PLATE 26.

Fig. 1.—**Women Dancing.**

Figs. 2, 3.—**Dancers painted for Tapakwirp.**

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3

DIEGUEÑO DANCERS.







EXPLANATION OF PLATE 27.

Fig. 1.—Assistant posing facing the sun in the Tapakwirp dance.

Fig. 2.—Tapakwirp dancer resting. The leader stands at his left.

Fig. 3.—Tapakwirp dancer whirling.

Fig. 4.—Tapakwirp dancer squatting in the midst of a song.



1



2



3



4

DIEGUEÑO TAPAKWIRP DANCE.

Sustainable Development



1



2

DIEGUEÑO KERUK CEREMONY AND MOURNER.

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